DOCUMENT RESUME

ED 455 165 SO 032 868

TITLE	What Works? A Blast from the Past. Project Profiles from the 60s and 70s...Social Marketing, Community Media, Mass Campaigns, Interactive Radio, Gender Equity, Participation, the Media & More.
INSTITUTION	Academy for Educational Development, Washington, DC.
PUB DATE	2001-00-00
NOTE	283p.
AVAILABLE FROM	Academy for Educational Development, 1825 Connecticut Avenue, NW, Washington, DC 20009-5721; Tel: 202-884-8000; Fax: 202-884-8400; e-mail: pubsinfo@aed.org; Web site: http://www.aed.org/.
PUB TYPE	Reference Materials - Directories/Catalogs (132) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC12 Plus Postage.
DESCRIPTORS	*Community Action; *Developing Nations; *Development Communication; Foreign Countries; *Mass Media; *Profiles; Program Descriptions; *Social Change
IDENTIFIERS	Academy for Educational Development; Project Innovation; *Social Marketing

ABSTRACT

The Academy for Educational Development (AED) has been in the social marketing, communication, and participation business for some 40 years. This book profiles 82 projects carried out in the 1960s and 1970s in countries around the world. These projects were researched and documented by AED under its Clearinghouse on Development Communication. It is hoped that the book's profiles of extraordinary early experiments with social marketing, mass media, interactive radio, and participation might benefit a new generation of communication professionals. Profiles in the book describe applications to fields as diverse as basic education, child survival, family planning, agriculture, community organizing, and participatory media. The book opens with an easy-to-read index and a table of contents. Synopses of each project follow, providing a description, results, facts of note, references, target audience, objectives, media, donors/sponsors, duration, and contacts. (BT)

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What Works? A Blast from the Past.

Project Profiles from the 60s and 70s...Social Marketing, Community Media, Mass Campaigns, Interactive Radio, Gender Equity, Participation, the Media & More.

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What Works?

A Blast from the Past

Project profiles from the 60's and 70's...

- *Social Marketing*
- *Community Media*
- *Mass Campaigns*
- *Interactive Radio*
- *Gender Equity*
- *Participation, the Media & more.*

What's new...not as much as you think!

AED Connecting People Creating Change

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AED is a private, nonprofit organization with 40 years of experience in promoting human development-through social marketing, plus education, training, research, and cultural exchange. AED has more than 800 professionals working in 120 countries on problems of access to education, quality in health care, environmental protection, democracy-building, transportation, and youth development.

AED's Social Change Group puts scientists, engineers, and marketers at the same table to create products, programs, and messages that promote social change. We measure success by changes in communities, individuals, and policy. Social marketing is the blueprint we use to manage the change process. Our key to success is to begin with a wide lens, then narrow our focus to find the best target of opportunity for real change.

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FOREWORD

People are always asking us, what's new? When you've been in the social marketing, communication, and participation business as long as Academy for Educational Development has (some 40 years), each year it becomes a tougher question to answer candidly. Yes, of course, there are new technologies such as the Internet, new problems such as HIV/AIDS, and new regions such as the emerging democracies of Eastern Europe, and new science.

Many fundamentals, however, remain the same. Important programs from the past still offer valuable lessons for the future. Experiments that were once considered to be ahead of their time can show us how to achieve goals that today have finally become priorities.

This volume—***A Blast from the Past***—profiles 82 projects carried out in 1960s and 1970s in countries around the world. They were researched and documented by AED under its Clearinghouse on Development Communication. These profiles are reprinted here in the hopes that a new generation of communication professionals might benefit from these extraordinary early experiments with social marketing, mass media, interactive radio, and participation. The profiles describe applications to fields as diverse as basic education, child survival, family planning, agriculture, community organizing, and participatory media. These profiles are indexed according to sector focus, use of media, and country. We welcome your comments regarding the usefulness of these profiles, as well as your suggestions on lessons that we can apply today from *A Blast from the Past*.

PROJECT PROFILE INDEX

SECTOR	COUNTRY	TITLE	PAGE NUMBER	CORRESPONDENCE	FOLK MEDIA	INTERPERSONAL	PRINT	RADIO, BROADCAST	RADIO, TWO-WAY	SATELLITE	TV, BROADCAST	TV-VTR
AGRICULTURE	Afghanistan	Assistance To Rural Broadcasting	1			✗		✗				
	Guatemala	Lefatshe La Rona-Our Basic Village Education	5			✗	✗	✗				
	Guatemala	Basic Village Education	9	✗		✗		✗				
	India	School-On-The-Air	12	✗				✗				
	Kenya	Kipsigis Homesteads Cattle-Dip Management Program	15			✗	✗					
	Lesotho	The Training Component of the Thaba Bosiu Rural Development Project	18			✗	✗	✗				
	Mali	Mali Livestock II Project	22			✗		✗				
	Mexico	Plan Puebla	26			✗	✗					
	Mexico	Radio Huayacacotla	30			✗	✗	✗				
	Philippines	Masagana 99	33			✗	✗	✗			✗	
	Senegal	Radio Educative/Pilot Project in Communication Media in Adult Education	37	✗		✗		✗			✗	
	Thailand	The Radio Farm Forum Pilot Project	41				✗	✗				

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SECTOR	COUNTRY	TITLE	PAGE NUMBER	CORRESPONDENCE	FOLK MEDIA	INTERPERSONAL	PRINT	RADIO, BROADCAST	RADIO, TWO-WAY	SATELLITE	TV, BROADCAST	TV-VTR
EDUCATION & HUMAN RESOURCES	American Samoa	ETV Samoa	44			✗	✗				✗	
	Bangladesh	Brac's Sulla Functional Education Project	47		✗	✗	✗					
	Brazil	ETV Maranhao	50			✗	✗				✗	
	Brazil	The Mobral Adult Literacy Experiment	53			✗	✗	✗			✗	✗
	Brazil	Movimento de Educacao de Base	57			✗	✗	✗				
	Canary Islands	Radio ECCA	60			✗	✗	✗				
	Dominican Republic	Radio Santa Maria	64			✗	✗	✗				
	Ecuador	The Shuar Radio Schools	67			✗	✗	✗				
	El Salvador	Instructional TV and Educational Reform	71			✗	✗				✗	
	Honduras	Accion Cultural Popular Hondurena	74				✗	✗				
	India	SITE Teacher Training	78			✗	✗	✗		✗	✗	

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EDUCATION & HUMAN RESOURCES (Continued)	Kenya	Correspondence Course Unit	82	✗		✗	✗		✗			
	Korea	KEDI Educational Radio and Television Broadcasting	86			✗	✗	✗			✗	
	Korea	Korean Air and Correspondence High School	90			✗	✗	✗				
	Lesotho	Lesotho Distance Learning Centre	94			✗	✗	✗				
	Mauritius	Mauritius College of the Air	98			✗	✗	✗			✗	
	Mexico	Radioprimaria	101			✗	✗	✗				
	Mexico	Tarahumara Radio School	105			✗	✗	✗				
	Nicaragua	Radio Mathematics	109			✗	✗	✗				
	Niger	Tele-Niger	112			✗	✗				✗	
	Paraguay	Rural Radio Education Project	116			✗	✗	✗				

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SECTOR	COUNTRY	TITLE	PAGE NUMBER	CORRESPONDENCE	FOLK MEDIA	INTERPERSONAL	PRINT	RADIO, BROADCAST	RADIO, TWO-WAY	SATELLITE	TV, BROADCAST	TV-VTR
HEALTH	Colombia	The Candelaria Project	120			✗	✗					
	Ghana	The Danfa Comprehensive Rural Health and Family Planning Project	124			✗						
	Guatemala	The Pila Project	128			✗						
	Guatemala	Promotores de Salud	131			✗						
	Haiti	Radio Docteur	135				✗	✗				
	Iran	The Kavar Village Report	138			✗	✗					
	Kenya	Zaa Na Uwatunze	142			✗		✗				
	Sri Lanka	Health Education Radio Dramas	146	✗				✗				
	Tanzania	Man Is Health (Mtu Ni Afya)	150			✗	✗	✗				
	U.S.A.	Telemedicine in Alaska	153				✗		✗			✗

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SECTOR	COUNTRY	TITLE	PAGE NUMBER	CORRESPONDENCE	FOLK MEDIA	INTERPERSONAL	PRINT	RADIO, BROADCAST	RADIO, TWO-WAY	SATELLITE	TV, BROADCAST	TV-VTR
INTEGRATED DEVELOPMENT	Bangladesh	The Comilla Project	157		✗	✗	✗					
	Botswana	Laedza Batanani	161		✗	✗						
	Colombia	Accion Cultural Popular (ACPO)	164			✗	✗	✗				
	Ecuador	Radio Mensaje	167			✗		✗				
	Ethiopia	Agri-Service Ethiopia	170	✗		✗	✗					
	Ethiopia	Integrated Family Life Education Project	173			✗	✗					
	India	Satellite Institutional Television Experiment (SITE)	177							✗	✗	
	Ivory Coast	INADES	181	✗		✗	✗					
	Niger	Association of Radio Clubs of Niger	184			✗	✗	✗				
	Pakistan	The Shadab Integrated Rural Development Project	187			✗	✗					
	Tanzania	Audio Cassette Listening Forums	191			✗	✗					
	U.S.A.	The Lower Yukon (Skyriver) Project	195			✗						✗
	Upper Volta	Project for Equality of Access to Education for Women and Young Girls	198		✗	✗	✗	✗				

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SECTOR	COUNTRY	TITLE	PAGE NUMBER	CORRESPONDENCE	FOLK MEDIA	INTERPERSONAL	PRINT	RADIO, BROADCAST	RADIO, TWO-WAY	SATELLITE	TV, BROADCAST	TV-VTR
NUTRITION	BRAZIL	Experimental Nutrition Project	202			✗						
	India	Nutrition Mass Communication Project	205		✗		✗	✗				
	India	Project Poshak	209		✗	✗						
	Mexico	Mass Media vs. Direct Education Program	213			✗	✗	✗				
	Philippines	Mass Media Nutrition-Advertising Campaign	216			✗		✗				
	Trinidad and Tobago	Breastfeeding Campaign	220				✗	✗				
	Tunisia	Nutrition Advertising Campaign	223			✗		✗				

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SECTOR	COUNTRY	TITLE	PAGE NUMBER	CORRESPONDENCE	FOLK MEDIA	INTERPERSONAL	PRINT	RADIO, BROADCAST	RADIO, TWO-WAY	SATELLITE	TV, BROADCAST	TV-VTR
POPULATION	Guatemala	Aprofam Family Planning Program	227			✗	✗	✗				
	Indonesia	The JAMU Project	231			✗	✗	✗				
	Iran	The Model Family Planning Project	234			✗	✗	✗				
	Jamaica	The Have a Heart Family Planning Campaign	237			✗	✗					
	Korea	The Korean Mothers' Club Program	240			✗	✗					
	Nigeria	My Brother's Children	244			✗	✗					
	Philippines	Agricultural Analogy Approach to Family Planning	247		✗	✗						
	Philippines	Batingaw	250			✗	✗					
	Sri Lanka	PREETHI Marketing Program	254			✗	✗	✗				

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SECTOR	COUNTRY	TITLE	PAGE NUMBER	CORRESPONDENCE	FOLK MEDIA	INTERPERSONAL	PRINT	RADIO, BROADCAST	RADIO, TWO-WAY	SATELLITE	TV, BROADCAST	TV-VTR
WOMEN IN DEVELOPMENT	Senegal	Radio Educative/Pilot Project in Communication Media in Adult Education	37			✗		✗				
	Colombia	The Candelaria Project	120			✗	✗					
	Ghana	The Danfa Comprehensive Rural Health and Family Planning Project	124			✗	✗					
	Guatemala	The Pila Project	128			✗						
	Kenya	Zaa Na Uwatunze	142			✗		✗				
	Ivory Coast	INADES	181			✗	✗					
	Tanzania	Audio Cassette Listening Forums	191			✗	✗					
	Upper Volta	Project for Equality of Access to Education for Women and Young Girls	198		✗	✗	✗	✗				
	Mexico	Mass Media vs. Direct Education Program	213			✗	✗	✗				
	Philippines	Mass Media Nutrition-Advertising Campaign	216			✗		✗				
	Trinidad and Tobago	Breastfeeding Campaign	220				✗	✗				
	Iran	The Model Family Planning Project	234		✗	✗	✗	✗				
	Korea	The Korean Mothers' Club Program	240			✗	✗					

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ASSISTANCE TO RURAL BROADCASTING
AFGHANISTAN

TARGET AUDIENCE:	Farmers in the Afghan provinces of Wardak, Logar, Kundaz, and Heart (approximately 17,500 people)
OBJECTIVES:	To improve rural broadcasting as a means of supporting rural development activities and to test the feasibility of establishing in Afghanistan a communication system involving radio, cassettes, and farmers' feedback
MEDIA:	Radio, tape recorders and cassettes, and interpersonal communication
DONORS/SPONSORS:	Food and Agriculture Organization of the United Nations; Afghanistan's Ministries of Agriculture and Education; Australia's FFH AD; and Radio Afghanistan
DURATION:	Initiated 1973; implemented in 1976; Phase I terminated in 1977; Phase II pending
CONTACTS:	Trevor L. Stockley, Rural Broadcasting Specialist, Ministry of Agriculture, Kabul, Afghanistan; Abdullah Naik, General President of the Extension Department, Ministry of Agriculture, Kabul, Afghanistan; S.Y. Wasiq, Director, Radio Afghanistan, Kabul, Afghanistan; and Fazel Rahim, Deputy Minister for Agriculture, Kabul, Afghanistan

DESCRIPTION:

The Assistance to Rural Broadcasting Project took shape in 1973 following meetings in Afghanistan of government officials with the Chief of FAO's Development Support Communications Branch. The project was designed to reflect the Afghan Government's desire to keep farmers apprised of improvements in agriculture and livestock-production techniques and to make them aware of the existence of availability of credit, equitable means of distributing irrigation water, and the possibility of forming farmers' cooperatives. By the time the political and logistical obstacle to implementation had dissolved, 1976, the project had acquired a second dimension—that of a communication support system for the national land reform then in progress.

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Abandoning early plans to establish and then to test the feasibility of a rural radio forum in Afghanistan, the project directors decided that a communication system involving radio, cassettes, and farmer's feedback would meet local needs better than the conventional radio forum could. Accordingly, tape recorders and on e hundred tapes were purchased, and a survey aimed at determining the kinds of information that farmers wanted and could use (and that project employees could provide) was carried out. In December 1976, tapes produced on the basis of the survey findings were circulated in two provinces.

The radio component of the communication system was already well-established in the project area when the project began. Radio ownership in rural Afghanistan is high and the Ministry of Agriculture's Department of Extension and Development has been contributing twenty minutes of programming to the nightly broadcast of 'Village Home Agriculture." However, members of the production corps and listeners alike were far from satisfied with the quality and content of the broadcasts.

To update program effectiveness, then, a foreign consultant was brought into the Radio Unit of the General Directorate of Information and Publishing of the Department of Extension and Development to provided in-service training for one year to the seven full-time staff members. At the same time, additional recording equipment was bought and a staff vehicle was secured for use in making field trips and collecting farmer's feedback.

Fifty-six extension agents from eight extension units were selected to participate in the project. After being briefed and receiving radios, these agents conducted the sixteen meeting that served as the pre-project survey and visited villages on Wednesdays (when "Village, Home and Agriculture" was broadcast) to drum up interest in the radio broadcasts, to distribute cassettes (in Wardak and Logar only), and to solicit farmers' request, criticisms, questions, and comments.

Reflecting both the strengths and difficulties encountered by staff members in this project, tentative plans for extension of the project beyond the pilot phase specify that the combination of radio, cassette recorder, and extension agent be retained, that a full-time technician/maintenance person be hired, the Radio Unit personnel be well-versed in either agriculture or extension work, that a filmstrip component be added to the media mix, and that more study be devoted in the future to measuring the rate at which farmers adopt improved practices.

RESULTS:

Records kept by the extension agents show that 3,883 of the roughly 17,500 farmers in the target area had heard at least one tape—a finding confirmed by the extrapolation of the figure (22.5 percent) reached in the evaluation survey. In contrast, two out of every three farmers in the area had heard programs on the national land reform, and four out of five of those who heard the message felt that their questions had been answered satisfactorily.

In addition to exposure to the medium and the message, increases in knowledge, the correlation of contacts (with tapes and extension agents) with radio-listening habits, the relationship between the specificity of the message and the likelihood that the hearers will act upon it, the relationship between the tendency to provide feedback and the tendency to take action based on newly acquired information, and the relationship between the timeliness of the message and the adoption of advice were all studied.

Not surprisingly, the spread of ideas proved easier to trace than the spread of improved agricultural practices. Moreover, little effort was made to measure changes in farming techniques since the project resources were limited. Research did, however, establish that farmers in the experiment acquired information that they considered useful, tended to value cassette-carried (as opposed to that passed from farmer to farmer) information more as they grew accustomed to the medium, and contended more or less unanimously that "Village, Home & Agriculture" had improved markedly during the year of the experiment. The evaluation survey also showed that half the farmers who had heard the tapes listened regularly to the radio broadcast, compared with three in ten thousand who had not heard the tapes. As for the hypothesis that the more tailored a particular recommended technique is to local needs the more likely it is to be tried, it held good for only three of the five variables tested.

OF NOTE:

- The pre-broadcast survey revealed that farmers tended to be interested in topics that are seasonal, local, and related to decisions they have to make. Specifically, the cassettes carried information on the control of rye grass in wheat, of rust and smut in wheat, on the pruning of fruit trees, and the control of field mice.
- Field trips related to the projects were far more than whirlwind tours. Some lasted as long as 25 days.

- Post-project research indicated that receptivity to the broadcast and taped messages had nothing to do with a farmer's age and that the level of education correlated with willingness to try a new practice with respect to only one of the five variables measured.
- The FAO-employed consultant who conducted the in-service training for members of the Radio Unit developed a training manual, "Notes on Communicating Through Radio," and a glossary of technical terms.
- Wardak and Logar were selected as sites for the cassette experiment because agriculture extension programs in both were already active, farmers and village leaders were prepared to practice in the project, local authorities promised to cooperate, other development projects were under way, control groups could be identified for experimental purposes, and roads were good enough to permit year-round access by a vehicle with four-wheel drive.

REFERENCES:

"Assistance to Rural Broadcasting—Afghanistan, Terminal Report", TF.AF6.10(FH), Trevor L. Stockley, Food and Agriculture Organization of the United Nations, Rome, July 1977.

"Development Communication in the Provinces of Wardak, Logar, Kundaz and Heart," Draft, F.A.O., Rome, October 1977.

Clearinghouse on Development Communication
April 1978

LEFATSHE LA RONA—OUR LAND
BOTSWANA

TARGET AUDIENCE:	The adult population of Botswana
OBJECTIVES:	To involve the public (particularly its rural constituents) in learning about and commenting on land-use policies
MEDIA:	Radio, print, flipcharts, and inter-personal communication
DONORS/SPONOSRS:	Botswana's Ministry of Local Government and Lands and other national governmental agencies, with financial assistance from the British Government
DURATION:	Begun in 1975; carried our primarily in 1976; follow-up stage completed in 1977
CONTACTS:	Ministry of Local Government and Lands, Private Bag 006, Gaborone, Botswana; Ross Kidd and Alan Etherington, International Council for Adult Education, 29 Prince Aruthur Avenue, Toronto, M5R 1B2, Canada; and David Crowley, Head, International Department, The Industrial Society, 48 Bryanston Square, London WI, U.K.

DESCRIPTION:

LEFATSHE LA RONA—Our Land, a project of Botswana's Ministry of Local Government and Lands, has been both an experiment on participatory decision-making and an attempt to solve a land-use problem at the heart of a semi-arid country's economy. Botswana's traditional tribal grazing system—a series of White Papers issued by the government between 1971 and 1975 revealed—could not long withstand pressures exerted by increases in human and livestock populations. Under excessive strain, the communal grazing areas adjacent to villages were plagued by soil erosion, and uncontrolled grazing near surface water was contributing to the deterioration of the veld. At the same time, policies governing well-drilling tended to work against smaller cattle owners (as opposed to wealthy individuals). By 1975, the national government had identified means of reversing land degradation. It had developed a land-management policy based on the practices of stock controls, fencing, paddocking, early weaning, salt-and-bonemeal feeding supplementation,

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and rotational grazing. But it was also determined to preserve some of the values and features of the traditional land-tenure system and to protect the interests of those who own few or no cattle. Accordingly, it launched an educational and consultative campaign to explain and to get feedback on land-zoning policies and other aspects of the land-management program.

The "Public Consultation" staged by the national government took place in four phases. The first consisted of a two-month national speaking tour in the autumn of 1975. The President and his ministers attended more than 100 *Kgotlas* (community meetings) during this period, explaining public policy and fielding questions from villagers. The second phase, July of 1975 to February 1976, comprised briefings and seminars for government officers and others. The third phase, the Radio Learning Group Campaign, was trial-run in December 1975 and conducted on a full scale in 1976. The final phase, the analysis and use of the public responses culled during the Radio Learning Groups, took place in 1976 and 1977.

The Radio Learning Group Campaign involved a pilot project, leadership courses (held in May of 1976), materials preparation (from October 1975 to March of 1976), radio broadcasts (from June through July of 1976), and follow-up radio programs based on responses to the early broadcasts and aired from July to December of 1976. A limited amount of vital information on the land-zoning proposals and their implications for people in various parts of the country was broadcast during this campaign to roughly 3,200 listening groups averaging 15 members each. Every group had a discussion leader recruited and trained by extension workers (in agriculture, community development, and health) who functioned in extension teams. Each group met twice a week for five weeks to discuss the broadcasts and the specially prepared materials (flipcharts, and illustrated popular version of the White Paper on zoning policy, pictures, and study guides). After each program, the group leaders mailed a report on the group discussion to the campaign organizers, who used the information to work out land-use plans and prepare "answer" programs for broadcast.

RESULTS:

Original plans called for the organization of between 4,000 and 5,000 groups, while 3,510 were actually established. The attendance record was comparably positive, with one participant in five attending all meetings and each listening group member attending an

average of six. According to one estimate, one adult in six was reached directly by the campaign.

The desired outcome of *LEFATSHE LA RONA*, a national consensus on the need for need for new land-use policies and on the most effective ways for implementing such policies, appears to have been achieved. The Public Consultation (defined in the campaign as "government and public discussing together") revealed that the people of Botswana recognize the problem of overgrazing and see the presence of too many cattle as a major cause, that a large majority favored (though hesitantly) the principle of granting exclusive leasing rights to grazing land and also wanted such grazing land situated in the sand-velds where population density is low. About the formation of ranching groups, the people of Botswana are uncertain, though they acknowledge that this is a major mechanism by which a "small man" could benefit. Most RLG members opposed the setting of limits on the number of cattle that an individual farmer could hold. Most were also hesitant about adopting expensive, modern ranching methods but were interested in learning more about them and having access to the financing for them. These and other findings are being used by the national government and the regional Land Allocation Boards on an *ad hoc* basis in decision-making. They have been used to form laws or nationwide policies, since conditions and listening groups responses varied so much among Botswana's 11 districts.

OF NOTE:

- The main issues covered in the questionnaires used to gather feedback were grazing rights, zoning, the importance of present and future generations of caring for the land and respecting its limits, water rights, fencing, conservation in general, resettlement schemes, and possibility of establishing farmer's groups.
- Radio was selected as the primary medium because almost four-fifths of the adult population of Botswana cannot read or write.
- Although the official national language, Setswana, was use for radio broadcasts, some—very few—adults intended to benefit from the radio programs don't speak Setswana. Other problems related to the translation of English-language materials into Setswana were also encountered.
- One observer of the interministerial media campaign has raised the possibility that the campaign was too intense, that "media overkill" came into play.
- Some members of the Radio Listening Groups were openly suspicious of the government's interest in

their opinions. "Why, they asked," hasn't the government consulted us about other matters of public interest?"

- The cattle industry is the mainstay of Botswana's economy
- Report forms returned to project headquarters were tabulated and analyzed by computer

REFERENCES:

"*Lefatshe La Roma*—Our Land: The Report on the Botswana Government's Public Consultation on its Policy Proposals on Tribal Grazing Lands" Ministry of Local Government and Lands, Gaborone, September 1977.

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BASIC VILLAGE EDUCATION
GUATEMALA

TARGET AUDIENCE:	Indian and Latino farmers in Guatemala
OBJECTIVES:	To change farming practices and increase production through the effective use of communication
MEDIA:	Interpersonal communication, radio forums, graphic materials
DONORS' SPONOSRS:	Latin American Bureau of the U.S. Agency for International Development, and the Guatemalan Ministries of Education and Agriculture
DURATION:	Implemented in 1973; ongoing
CONTACTS:	Prof. Mario R. Dardon, Project Director, Programa de Educacion Basica Rural, 2a Avenida 8-53, Zona 1, Guatemala City, Guatemala; Richard Martin, Education Officer, U.S. AID/LAC, Rm. 2245 New State, Washington, DC 20523, U.S.A.

DESCRIPTION:

Basic Village Education (BVE) is a five-year experiment aimed at using communications media to acquaint Guatemalan farmers with modern agricultural practices. Its ancillary goal is to increase the effectiveness of extension worker so they can help solve individual and regional farming problems. The plan to test the cost-effectiveness of various mixes of communications media was implemented by the Academy for Educational Development under contract to the Agency for International Development (whose total contribution to the project will cumulatively total at least $1,650,000 by the time the project is completed). The plan originally call for three and, later, for four distinct communications mixes, representing increasing degrees of contact with the rural families "in two vastly different cultural and geographical settings."

In 1973, the project was initiated among the Spanish-speaking Ladinos (Mestizos) in the southern part of Guatemala. Roughly 18 months later, the experiment was extended to include the western highlands, where it was directed toward Quiche-speaking Indian population. In a survey conducted by the BVE staff in 1974, the illiteracy rate was pegged at 64 percent in the

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Yupiltepeque Valley of southern Guatemala and at 66 percent in rural communities near Monostenango in the highlands.

Radio was chosen as the main conduit for imparting new agricultural knowledge and stimulating behavioral change. Two radio stations broadcast eight hours a day, from 5 to 9 a.m. and from 4 to 8 p.m., Monday through Saturday. To attract and maintain a large listening audience, the BVE staff programs about 80 percent of the broadcast time with music, entertainment, and other programs unrelated to agriculture. The remaining hours are devoted to the discussion of farming. The core agricultural program includes 30-minute "agricultural magazine," radio novels, a question-and-answer interview with an agronomist, and 30 to 40 spots that carry agricultural messages.

The fist four different communication treatments consist of messages delivered by radio alone. The second adds a village "monitor"—locally selected and trained for about a month—who weekly visits four or five villages that together contain approximately 200 families and who holds late afternoon forums at which recorded radio messages are played on a cassette recorder. The monitor uses flipcharts and posters to spark discussion, gives out take-home sheets, and in some cases, cultivates demonstration plots. A third treatment provides low-level technical assistance from agronomists, each of whom serves roughly 600 families. The BVE field agronomists work with monitors in the villages, conducts plot demonstrations, helps identify local crop-production problems, and advises farmers. He also serves as the monitors' supervisor and trainer and is an important feedback channel form the field. The fourth, added in 1975, employs monitors alone in areas not reached by radio shows.

RESULTS:

Contrary to expectation, and probably because programming is so carefully tailored to local needs, radio alone seems to be having a significant impact on farmers' behavior. This particular experiment design, some say, has created an extended personal communications system rather than a traditional impersonal broadcasting sphere. Also, the monitors and agronomists appear to reinforce the radio message effectively.

The radio forums tended to attract farmers already disposed to adopting more modern farming practices. But some farmers who did not attend the forums also changed their farming practices. Chief among the

changes were the selection of heartier corn seed and the use of fertilizer at flowering and seeding time. Fungicide use also increased among many area farmers, but this change was less marked.

OF NOTE:

- In 1976, the usual effect of low rainfall on crop yield was exacerbated by the drought that occurred in the critical months of July through September.
- The experiment was disrupted by the earthquake in February of 1976. For a month project resources were used almost exclusively in relief activities.
- The introduction of silk-screening in 1976 produces superior graphics, eliminated tedious hand copying, and allowed artists more time to integrate feedback concepts into future illustrative materials.

REFERENCES:

"The Basic Village Education Project: Third Interim Report, Field Operations, June 1975—1976," Academy for Educational Development, Washington, DC, 1976

"The Basic Village Educational Project: Third Interim Report, Evaluation Component, University of Florida, July 1976." Academy for Educational Development, Washington, DC 1976.

Clearinghouse on Development Communication
June 1977

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SCHOOL-ON-THE-AIR
INDIA

TARGET AUDIENCE:	Indian farmers
OBJECTIVES:	To impart a systematic knowledge of agricultural science to farmer listeners via radio broadcasts
MEDIA:	Radio, supplemented by written correspondence
DONORS/SPONSORS:	All Indian Radio
DURATION:	Initiated in August 1975; ongoing
CONTACTS:	Dr. Pradip K. Dey (Project Director), Farm Radio Officer, All India Radio Calcutta, India

DESCRIPTION:

In 1975 All India Radio developed a strategy to deal with the complex problem of delivering, in a short period of time, modern farming information systematically through channels acceptable to the rural farming population of West Bengal. The radio station chose literate farmer listeners with access to radios as the target audience for a broadcast series on agricultural science information. Its staff assumed that if systematic knowledge of agriculture were imparted to the farmer listeners, they would become "contact farmers" and disseminate modern agriculture innovations to villagers hitherto incapable of interpreting, or without access to, complex information on modern agriculture.

The School-on-the-Air for farmers broadcast six courses between late 1975 and early 1976. Each course consisted of five half-hour lessons. The curriculum was planned with the help of the Agricultural Department of the State Government of West Bengal, which also selected the broadcast trainers and teachers.

Trainers prepared the lessons and read them over the radio every Sunday between 7:00 and 7:30 p.m. The delivery pace was slow so the farmer listeners could write down important points. Key points, as well as unit numbers and measures, were repeated several times through the broadcast. At the end of each program, questions were broadcast. Before the listeners mailed responses to these questions to the radio station, their request for clarification on points broadcast during the program were answered. Trainers marked each paper,

and at the end of the year the radio listener received a certificate of appreciation along with his grade.

RESULTS:

Although All India Radio feels that a large number of farmers may have benefited from the broadcast programs, only 114 actively participated in the correspondence course during the first "school year." These trainee listeners were surveyed at the end of the training session to ascertain their interest and expectations, and their potential for becoming contact farmers. Most participants, the survey showed, were between the age of 20 and 29, educated at the high school level, and of middle income status. About 53 percent were closely associated with cultivation, while 35 percent were students or teachers. Most reported listening to the lessons on their own radios, and most were prone to greater social participation after hearing the broadcast.

Overall, participants generally took a total of three out of the six courses offered during the training session. Most listeners were interested primarily in courses on the cultivation of wheat and summer paddy, two widely cultivated and remunerative winter crops in West Bengal. They reported that their strongest motive for participating in the course was to learn more about scientific farming, but that the desire for realizing increased profits came second.

After the first-season responses were analyzed by members of the Department of Agriculture of West Bengal, the 1976-77 School-on-the-Air was altered to stress the most popular subjects, and broadcast times were changed. The 1976-77 courses subsequently drew a higher number of active participants (155-180), depending upon the course). According to the project director, the evaluation showed that the likeliest participants in the future farmers' School-on-the-Air courses will be prospective leaders—potential contact farmers.

OF NOTE:

- To measure listeners' potential for becoming contact farmers, researchers compared the participants' socio-personal characteristics with those of potential farm leaders identified by past investigators.
- Studies do not confirm that feedback from listeners altered future broadcasts, nor that broadcast trainers directly asked radio listeners to reach out to

disadvantaged farmers with the innovative broadcast information.

- While farmers originally listed making monetary gains as the second most important reason for listening to the radio broadcast, a follow-up study showed that expectations for realizing such profits dropped during or after the course.

REFERENCES:

"Agricultural Broadcasting: A Novel Approach in Calcutta," Pradip K. Dey, Combroad, No. 34, January-March 1977

"Identification of Participants of the School-on-the-Air for Farmers, " Indian Agriculture, Vol. 20, No. 2, 1976

Clearinghouse on Development Communication
June1977

KIPSIGIS HOMESTEADS CATTLE-DIP MANAGEMENT PROGRAM
KENYA

TARGET AUDIENCE:	Maneret dairy farmers near Sotik and Kipsigis (about 200 in all)
OBJECTIVES:	To use small media to provide cattle-raisers with educational and motivational information related to a tick-eradication program
MEDIA:	Cassette tape recorders, posters, photoessays, photographs, film, print, and interpersonal communication
DONORS/SPONSORS:	U.S. Peace Corps., the Government of Kenya
DURATION:	Begun in 1970; ongoing
CONTACTS:	Bruce E. and Alisa K.A. Lundseen, Arusha Appropriate Technology Project, P.O. Box 768, Arusha, Tanzania, Joseph Kenya, Cattle-Dip Supervisor, Sotik, Kenya

DESCRIPTION:

The U.S. Peace Corps began the Kipsigis Homesteads Cattle-Dip Management Program in 1970 to make headway against the fatal strains of tick-borne cattle diseases so widespread in Kenya. The adult-education component of the project was later revised and expanded when it became apparent that the project had gone awry. Additional educational activities were needed because many of the local farmers clearly did not understand how dipping cattle controls ticks or why dipping cannot work unless it is done regularly. Indeed, some farmers did not dip any of their cattle, some did so in a hit-and-miss fashion, and some dipped only their upgraded animals, leaving the indigenous Zebu stock open to tick attacks. At the same time, the dipping facilities were not being maintained properly, and the Kipsigis Cooperative's management was not obtaining enough chemical concentrate to keep the dipping solution at the necessary strength.

Discussion with farmers and local veterinary workers confirmed the assumption that the farmers did not understand how dipping cattle controls ticks. They also revealed that farmers who did grasp the relationship were reluctant to pay dipping fees when the chemical

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solution was too week to be effective. While veterinary extension workers had tried to remedy these problems by consulting with groups of farmers and with members of the Cooperative Management, their lack of experience with non-formal adult-education approaches fitted them to do little more than chide uncooperative cattle farmers.

To fill this information gap, two Peace Corps volunteers worked with the veterinary extension agents to develop photobooklets (with Swahili captions and an accompanying taped narration in the local language), three-dimensional demonstration models, and other audio-visual aids for use at the dipping facility and in farmers' meeting and Cooperative Committee sessions.

Care is exercised in all these learning activities to involve the Wazee (or "venerable elders"). These older farmers are called upon to tell the bygone animal-husbandry practices, and their stories prompt the other farmers to reflect upon changes (such as the introduction of graded animals) and their implications. All the farmers in the groups are free to ask and answer questions and to share information. Outside resource people participate in these discussions too, but they take pains to refrain from introducing new information until local people are ready and able to use it.

Outside of the meetings, the primary medium is the audio cassette recorder. Use of the recorder enables project workers to obtain farmers' reflections to the educational activities, to share the proceedings of these meetings with farmers unable to attend, and to record oral history related to agriculture.

RESULTS:

Through discussion, solutions that incorporated both knowledge within the community and new information relevant to farmers' needs and situations were developed.

Management of the dips became more efficient, a greater emphasis was placed upon maintaining the correct chemical concentration in the dip tanks, an improved system of record-keeping was devised and put to use, and much-needed repairs to the dipping facilities were made. Many farmers began dipping all their cattle regularly, as well as adopting other improved animal-husbandry practices. As a result of these changes, veterinary records show, cattle deaths due to tick-borne diseases decreased substantially once the communication component of the project was functioning.

OF NOTE:

- Educational Field Days were held in the Sotik area, started in 1970. These Days offered farmers a chance to learn more about animal diseases and animal-husbandry practices.
- To illustrate the idea that understrength solution will not kill ticks, project workers conducted a simple demonstration using only a test tube, colored liquid, and toy cows.
- The written records kept as part of this project show which farmers have dipped their cattle in a given week and how many of his cattle each dipped. Such records, along with calendars, have helped illiterate farmers in particular. They both show the importance of precise timing to effective planning.
- Language problems and production difficulties have limited the effectiveness o f 16mm film in this project.
- The audio-visual aids developed in conjunction with Kipsigis Cattle Dip Program reflect Andreas Fuglesang's finding that black and white photographs with insignificant details blocked out often convey information to illiterates better than do silhouettes, line drawings, or untouched–up photographs.
- Slides are displayed outdoors in plastic folders in the daylight, so projectors and darkened rooms are not essential to the program.
- Secondary-school students in Kipsigis listen to the tapes and look at the photoessays made for the Maaraet farmers. This way, the two age and social groups keep in touch.

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"The Potential of Locally Produced Materials and Small Media in Community Development." Bruce E. Lundeen and Alisa K.A. Lundeen, unpublished paper, December 1977.

"Kipsigis Homesteads," Bruce E. Lundeen and Alisa K.A. Lundeen, unpublished photoessay, undated.

"Village-Made Educational Materials: Three Experiments That Worked," Bruce and Alisa Lundeen, Development Communication Report, Issue 23,

Clearinghouse on Development Communication
July 1978

THE TRAINING COMPONENT OF THE THABA BOSIU RURAL DEVELOPMENT PROJECT
LESOTHO

TARGET AUDIENCE:	Agricultural agents who market improved seeds and fertilizers in the Thaba Bosiu
OBJECTIVES:	To provide job-related training and information to Village Distribution Point Agents
MEDIA:	Print, radio, demonstrations, role-playing, and interpersonal communication
DONORS/SPONSORS:	The Government of Lesotho, the World Bank, and U.S. AID
DURATION:	Begun in 1976; ongoing under Ministry of Agriculture auspices
CONTACTS:	Paud Murphy, General Secretary, KEDCO, 11, Ely Place, Dublin 2 Ireland, Ken Tseka, Lesotho Distance Teaching Center P.O. Box 781, Maseru 100, Lesotho; Lipholo Makhetha, LDTC, P.O. Box 781, Maseru 100, Lesotho

DESCRIPTION:

The Thaba Bosiu Rural Development Project (TBRDP) was established by the Lesotho Government with assistance from the World Bank and U.S. AID in 1973. It operates in a 121,000-hectare area containing 17,000 farm households near Thaba Bosiu Mountain (the summit on which the first King, Moshoeshoe, held out against the Boers and the Zulus). The objectives of the project are to control erosion and to increase crop production, to encourage integrated farming, and to provide data for use in preparing similar projects in other areas. Project activities have included road-building, conducting agricultural research, creating credit programs to help farmers buy seed and fertilizer, establishing farm-supply stores and an asparagus-canning factory, and circulating timely agricultural information to farmers.

In late 1975, TBRDP asked the Lesotho Distance Teaching Center (an organization founded in 1974 to make radio-mediated and correspondence courses and various self instruction materials available to out-of-

school farmers and to offer technical services and expertise to other educational organizations in Lesotho) to collaborate on the design and production of materials for training Village Distribution Point Agents (VDPA's), the villagers who sell the farm supplies for 3 percent commission. LDTC subsequently conducted a preliminary survey and proposed a training package to TBRDP. After some discussion, the two bodies decided to produce illustrated handbooks in English and Lesotho, posters, newsletters, and radio spots for use in training tree types of clients: agents whose present skills are inadequate and who are thus not meeting performance standards, competent agents who would perform better if given the chance to master new skills and knowledge, and new recruits. During a five-day training course in Maseru, these groups received illustrated handbooks (for at-home reading) that contain descriptions of agents' duties and fine points on record-keeping. The second class of trainees also received over a half-year post-training period six issues of a newsletter for their own use and multiple copies of a single poster to distribute. At the same time, they were exposed to eight 60-second radio spots that were broadcast regularly over Radio Lesotho.

An evaluation in 1976 of work of the Village Distribution Point Agents revealed that the training had not had the desired impact, ostensibly because the original training proposal had not been carried out fully. Accordingly, evaluators recommended that training materials be further integrated, that the training course make extensive use of role playing activities designed to duplicate on-the-job problems and encounters, and that the handbook play a greater part in training sessions. An additional change proposed for later courses was the involvement of LDTC staff in planning, setting objectives, and working with the course organizers from TBRDP. The main objective of this collaboration would have been to prepare for the eventual withdrawal of LDTC expertise when TBRDP staff felt satisfied with both the training package and their own ability to use it. As it happened, LDTC assumed the role of materials producer and TBRDP of materials distributor: the goal of integrating these two functions was never realized.

By 1978, the training courses had been phased out, although many TBRDP staff members have been recruited by the Ministry of Agriculture to continue some of TBRDP's programs.

RESULTS:

An informal evaluation conducted by staff from the Lesotho Distance Teaching Center in 1976 revealed that

about half the agents had read the entire handbook and half had read part of it. Yet , only 6 of the 15 quizzed were capable of locating specific sections in the handbook and thus of using it effectively as a reference work. The newsletter had a warmer reception, with three-fifths of the respondents reading it word-for-word and keeping it for future reference. The poster, it seems, had net been put up in most offices, in some cases because it had not been received. Of the nine agents asked if they had turned into the previous week's program-related radio broadcast, six answered yes but were hard-pressed to recall much information from the show. Over all, responses to questions on particular agricultural practices and information were divided, and performance on a test designed to gauge the VDPA's knowledge of standard forms was poor. Most but not all agents appeared to understand the procedures for extending credit and for receiving consigned goods.

A comparable test was given by LDTC staff of the agents who completed the TBRDP training in January 1977. While only three out of the 16 agent's who had taken the test a year before had performed at high levels, 13 of the 16 taking the test in 1977 scored 80 percent. The difference between these two sets of results is attributed by the curriculum designers to the effect of using mixed media, especially the combination of demonstrations and exercises. Commonly made errors, tat the same time, appeared to reflect a lack of arithmetical skills or capabilities that may indicate improper employment screening practices and not necessarily training failures.

OF NOTE:

- Part of LDTC's role has been to force the various divisions of TBRDP to clarify their procedures. Another is to act as a liaison between administrators and the Village Distributions Point Agents, spelling out the VDPA's duties and problems as part of an attempt to keep paperwork at a minimum. LDTC accepted these responsibilities reluctantly, questioning whether such matters should be left to an outside agency.
- A continuing problem besetting those in charge of the training course is materials distribution.
- Other than training needs, which in fact are accorded relatively low priority within the TBRDP, the Village Point Distribution Agents have other basic needs. They need ways, for example, to deal with the problems associated with taking responsibility for large sums of money, with overseeing rat-control measures, with minimizing

thefts form the project stores, and with accounting for equipment and work clothes.

- Shifting responsibility for materials design from the TBRDP staff had advantages and disadvantages. The main disadvantage, a lack of commitment by TBRDP field staff, can probably best be combated by keeping the staff thoroughly briefed.
- According to one evaluator, poor coordination among the divisions of TBRDP that were responsible for training VDPA's reduced the effectiveness of the course and the support scheme.

REFERENCES:

Evaluation of a Training Course for VDPAs of the Thaba Bosiu Rural Development Project," Lesotho Distance Teaching Center, January 1978.

Training Village Distribution Point Agents," Lesotho Distance Teaching Center, undated.

Evaluation of the TBRDP LDTC Training and Support Program for VDPAs." Lesotho Distance Teaching Center, December 1976.

Clearinghouse on Development Communication
January 1979

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MALI LIVESTOCK II PROJECT
MALI

TARGET AUDIENCE:	Malian farmers and herders
OBJECTIVES:	To introduce conservation techniques and range-management practices to improve breeding and production techniques in order to raise the nutritional and economic status of Malians and generate foreign exchange
MEDIA:	Radio, cassette tapes, audio-visual materials, and interpersonal communication
DONORS/SPONSORS:	Agency for International Development and the Government of the Republic of Mali
DURATION:	Preliminary phase begun in April 1977; ongoing through June 1979; 2nd phase planned for 1979-1981
CONTACTS:	Dr. Allasane Toure, Project Director, Mali Livestock II, Office Malien d Betail et du Viande (ombevi), B.P. 534, Bamako, Mal; Benedict Tisa, Box 205, Collingswood, New Jersey 08108, USA; Thurston F. Teele, c/o Chemonics, International Consulting Division, 1120 19th St., N.W., Washington, DC 20036

DESCRIPTION:

Negotiations between the U.S. Agency for International Development and Malian Government on the Livestock II Project got under way in drought-ridden Mali in early 1977. More than a relief effort, the project they designed was to provide a basis of self-sustaining agricultural development and to reduce the suffering associated with resettlement schemes. Its specific objectives are to promote the adoption of range-management, livestock production, and agricultural practices that will increase productivity on existing croplands and enable Malians to farm land that is presently uncultivated. Its three fronts reflect three different but mutually reinforcing approaches to problems that the project designers feel are economic, social, and technical: it has (1) a program in the Dilly region that is concerned with developing, testing, and applying new techniques for dealing with dry lands and livestock problems; (2) a program and facilities in Bamako for training extension workers; and

(3) in the southernmost region a "new lands" program focused on the development of underutilized lands (a chief feature of which is tset-se fly control). At the moment, the project staff includes twelve long-term specialists and a variety of short-term consultants.

The training component of the Livestock II Project may eventually encompass programs for five different kinds of audiences: existing cadres of livestock extension workers, recent college-level graduates of the Institut Polytechnique Rural (IPR) in Katibougou, graduates of IPR's middle-level program in Bamako, graduate of the Ecole des Infirmiers Veterinaries, and the eight or ninth-grades from non-technical schools. The courses for these groups are designed to prepare enrollees to assume greater responsibilities—the graduates of the Ecole des Infirmiers Veterinaires, for example, will become more well-rounded livestock and range-management advisors, and the youngest trainees will become village-level change agents. Some trainers and administrators are to receive initial training in the United States, and refresher courses are to be conducted periodically at the Sortuba project center for others.

The project's communication specialist, whose full-time services will be required for at least two years, assumes a battery of responsibilities. Some of these tasks are ongoing, while others relate to specific stages of the project's development. Open-ended activities include materials production, facility and equipment maintenance, and coordination of the center's business with that undertaken in the field in Dilly. Sequential activities comprise reviewing available production resources, procuring equipment, field-testing materials (charts, tapes, slides, etc.), stockpiling audio-visual aids, and conducting a thorough evaluation of the communication component at the close of the project's second year in 1979. Perhaps most important, that communication specialist will train change agents in communication methods and in the use of A-V materials in extension work.

RESULTS:

Still in its preliminary phase, the project has not been evaluated. The results of pre-project research, however, have revealed many social and economic factors that are sure to determine the eventual success or failure and the duration of the project.

The pre-project analysis of socio-cultural factors (part of which consisted of personal interviews conducted in six villages with different ethnic identities) indicated that the habits and the needs of the villagers range widely.

Some villagers are migratory, some are not. Some are dependent solely upon livestock or agriculture for a living, while some live in mixed economies. At the same time, interaction and cooperation among the many ethnic groups appears to be extensive. Investigations of socio-cultural factors (including human and animal disease patterns, nutritional status, range-management techniques, and knowledge of such subjects), though fairly thorough, were impede by language differences and by researchers' use of some terms unfamiliar to rural Malians.

The chief findings of the consultant who examined the communication component of the project—that new visual media will have to be introduced slowly and via the agricultural extension agents, that project workers can take very little for granted with respect to the villagers' exposure to modern media, that indigenous media and traditional performers should be used, that the literacy rate is low among the target population, and that the credibility of the staff promises to be a problem and a challenge—show that Mali's needs and problems are typical of those of many developing countries.

OF NOTE:

- Most of the people trained as change agents are recruited from the areas in which they will later work, and many are already in government employ in agencies other than OMBEVI.
- Visual aids are not used solely as teaching devices. They are instrumental in data-gathering, eliciting feedback, and winning local support for project activities.
- OMBEVI, FAO, Radio Mali, and Alphabetization Functional collaborate in the operation of the Mali Livestock II Project.
- With tape-recorders, one consultant suggested in a first-term report, change agents could help establish an oral library, contribute more significantly to evaluation and monitoring activities, and learn at home at self-selected paces.
- A pre-project survey on women's contribution and role in agriculture was conducted to help project planners focus on the needs of rural Malian women.
- Many Malian staff-members have received overseas training in such countries as Cuba, the United States, and Germany. According to one consultant, these Malians have a keener understanding of the "expatriate mentality" than most expatriate staff-members have of local culture.
- Even before the visual aids used in this project were pre-tested, the target audience was surveyed to determine how familiar and receptive it was to

photographs and drawings as media. In general, people responded most positively and actively to realistic pictures of familiar activities, objects, and settings.

- Each technical-assistance specialist has a Malian counterpart who will eventually take over his or her job.

REFERENCES:

Final Report: Livestock and Ranch Development in the Dilly Area—Media and Communications Aspects," Benedict Tisa, Chemonics, January 1978.

Final Report: Livestock and Ranch Development in the Dilly Area—Sociological and Communications Aspects," Walton Johnson, Chemonics, August 1977.

Assorted unpublished project documents, unsigned and undated.

Clearinghouse on Development Communication
April 1978

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PLAN PUEBLA
MEXICO

TARGET AUDIENCE:	Originally, campesinos in Mexico's Puebla Valley (approximately 100 participants in 1968 and over 8,000 out of a total population of 50,000 in 1976); now, campesinos in 11 Mexican micro-regions
OBJECTIVES:	To establish and eight-component agricultural program for stepping up corn production and to support that program with an agricultural information system
MEDIA:	Print, film, audio-visual aids, demonstrations, and interpersonal communication
DONORS/SPONSORS:	The Rockefeller Foundation working through the International Maize and Wheat Improvement Center (1967-73); Graduate College of Agriculture at Chapingo; the state government of Puebla; and Mexico's Ministry of Agriculture (sole supporter since 1973)
DURATION:	Begun in 1967; expanded in 1978; ongoing
CONTACTS:	Heliodoro Diaz Cisneros, General Secretary, Colegio de Postgraduados, Chapingo, Mexico

DESCRIPTION:

Plan Puebla was started in Mexico in 1967 with funds channeled through the International Maize and Wheat Improvement Center (CIMMYT) by the Rockefeller Foundation. A comprehensive attempt to help *camesinos* with tiny landholdings to increase their productivity, the program was designed to spread word of improved agricultural practices, chemicals, seeds, and technologies and to make sure that these ingredients could be obtained and used. More specifically, the research, informational, evaluative, and administrative components of the project together serve eight practical goals: (1) to introduce higher-yielding varieties of corn, (2) to develop and disseminate information on improved agricultural practices; (3) to open and maintain communication channels between *campesinos* and change agents; (4) to get adequate and timely supplies of agricultural inputs to easily accessible distribution points; (5) to make crop insurance available to *campesinos*; (6) to help bring the costs of agricultural

inputs into line with the prices fetched by crops in local markets; (7) to stabilize the market price of corn; (8) to insure *campesinos* access to low-interest credit. Naturally, an all-fronts program of this magnitude requires the close cooperation of research scientists, agronomists, educators, mass media specialists, anthropologists, administrators, government officials, and bankers—all of whom have been involved in both project planning and implementation.

The communication and evaluation components overlap in Plan Puebla. The same channels through which practical information drawn from agronomic research is coursed to farmers are also used to send feedback on project development and innovations-adoption back to researches and administrators. The resulting process, more circular than two-way, is nonstop and participatory. Its manifold objectives are to increase farmers' awareness of their agricultural options, to enable *campesinos* to adjust their economic expectations upward, and to encourage the adoption of tools, seeds, and techniques needed to realize those expectations. A further critical communication objective is to supply agricultural researchers with psycho-social data (thus enabling them to tailor their recommendations to the prevailing culture, as well as to soil conditions and climate) and with access to accumulated wisdom acquired by the *campesinos* through trail and error.

The mass media used in Plan Puebla included posters, handbills, other audio-visual aids, recordings broadcast in the villages from a sound truck, drama, and radio. During the project's third year, three films—"Do You Want to Increase Your Corn Crop?" and "Agriculture Credit" and "The Savings Account"—were also produced. The actors in all the films are *campesinos*, as are many of the speakers in the radio programs broadcast weekly during the growing season.

Two recent developments in the Plan Puebla include the completion of a training center for field-workers in 1976, and the expansion of the program to 11 micro-regions of Mexico in 1975. In addition, projects modeled upon Plan Puebla have been initiated in Peru (1971), Columbia (1971), and Honduras(1972).

RESULTS:

While the effectiveness of the communication component of Plan Puebla could be measured in terms of farmers' increases in awareness of new agricultural techniques and technologies, the best indicators of the project's success are corn yields, income gains, and improved living conditions. To wit, corn yields per

hectare increased 33 percent during the first five years of the project, gross family income increased significantly (from U.S. $666 in 1967 to U.S. $825 in 1970, adjusted for inflation), the percentage of families who supplemented the local diet by eating fish once or twice a week tripled between 1967 and 1971, and nearly a third of the *campesinos* in the project area upgraded their homes during the first four years of the project. In addition, the project appears to have dealt the regional unemployment and underemployment problem a second blow: by recommending labor-intensive instead of capital-intensive practices, Plan Puebla's technical-assistance workers helped increase the number of days of labor required per hectare in the area from 40.6 in 1968 to 52.7 in 1973.

Non-economic indicators of the project's impact include positive changes in attitude among farmers who have traditionally been fatalistic and suspicious, support among farmers for group activities (including risk-sharing and long-range planning), a dramatic reduction in the number of *campesinos* who default on farm loans, and a steady increase in the rate of participation in project activities.

OF NOTE:

- Without exception, *campesinos* who have themselves adopted the practices being recommended in *Plan Puebla* become the central actors in the demonstrations.
- The benchmark study conducted in 1968 revealed that the inhabitants of the proposed project site were extremely distrustful of outsiders, ostensibly because part of the lingering legacy of Spanish colonization is a feeling of racial inferiority on the part of the Indians.
- Dependence on formal leaders (elected officials and other prominent citizens) gradually dwindled in this project as informal leaders (people whose interest in the project itself set them apart from others) emerged.
- Technicians who perform their work well for two or three years are offered university fellowships in Master's Degree programs in Chapingo.
- The research branch of the *Plan Puebla* has made methodological advances that are proving useful to scientists at work at the National Institute of Agronomic Research in Mexico City.
- Farmers often spontaneously demonstrate pig-castrating, tree-pruning, and other useful skills in the course of the planned demonstration on another topic.

- A *campesino* drama troupe has developed a skit depicting the plight of the *campesino* at the mercy of the bloodsucking middleman. Although its impact has net been evaluated, the play has enjoyed a long run.
- Institutional problems have kept the majority of the *campesinos* in *Puebla* from participating in the credit scheme developed as part of the project.

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An Institutional Analysis of a Rural Development Project: The Case of the Puebla Project in Mexico, Ph.D. thesis, University of Wisconsin, 1974

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Clearinghouse on Development Communication
October 1978

RADIO HUAYACACOTLA
MEXICO

TARGET AUDIENCE:	Campesinos and other inhabitants of a 177,000 square-kilometer region in eastern Mexico (roughly 11 million people)
OBJECTIVES:	To stimulate self-reliance, self-expression, cultural integration, and agricultural productivity
MEDIA:	Radio, print, tape recorders, audio-visuals, and interpersonal communication
DONORS/SPONSORS:	Sistema Educativo Radiofonico (through 1973); Fomento Cultural y Educativo (since 1975); U.N. Food and Agriculture Organization; Ashraf Pahlavi Foundation International (Paris)
DURATION:	Begun in 1965; ongoing
CONTACTS:	Information Officer, FFHC/AD, U.N. Food and Agriculture Organization, 00100 Rome, Italy; R. Etemad, Ashraf Pahlavi Foundation International, 41, rue Dauphine, 75006 Paris, France

DESCRIPTION:

Radio Huayacacotla, in operation since 1965, represents an attempt to use "two-way" radio as a stimulus to self-development. Unlike standard listening forums, the project enlists the active participation and cultivates the continuous feedback of the audience, most of which is engaged in agriculture and nearly a third of which is composed of illiterates. Long-term project goals are both practical and idealistic: encouraging self-reliance and self-expression; fostering the social integration of the disenfranchised by making them aware of the economic and social barriers they must work against; providing practical information related to social problems and income-generating activities; promoting activities aimed at raising living standards; and providing recreational opportunities and entertainment. Begun under the auspices of Sistema Educativo Radiofonico, the project was taken over in 1975 by Fomento Cultural y Educativo, an organization dedicated to improving the lot of marginal socioeconomic groups.

The three components of the Radio Huayacacotla project are the radio station itself, the work team (a

coordinator, and agriculturist, a communications officer, three field workers, and two radio operators), and an advisor affiliated with the Education Research Center in Mexico. The project's radio program, broadcast from 4 p.m. to 8 p.m. daily, include news, agricultural education segments, entertainment, and useful information on a variety of subjects. The social problems addressed in programs are selected and developed with the audience's help: listeners write to express needs, complaints, or curiosity. Topics explored in such problem-oriented broadcasts include men's respect for women, the social implications of illiteracy, and the rood of alcoholism. The agricultural programs are keyed to local conditions—no easy task since the broadcast sphere encompasses a variety of climactic and soil conditions. They are also linked to timely demonstrations performed by agronomists on small experimental plots located in Huayacacotla.

Three pilot schemes related to the agricultural broadcasts were recently established in a preliminary attempt to increase the project area and the effectiveness of the agricultural education. Primarily information campaigns, the pilot projects are aimed at helping *campesinos* boost crop yields by adopting new techniques. The schemes are designed to promote fruit and vegetable production in particular and entail to form farmers' cooperatives to expedite dried-fruit production and marketing.

RESULTS:

Available information makes no mention of either baseline surveys or formative evaluation conducted in conjunction with Radio Huayacacotla. Project documents, however, do contain testimonies to voluminous mail received from listeners, to an extraordinary vitality and political consciousness among project participants, and to the replicability of the project elsewhere in Mexico. In addition, the project program was broadened in 1975 primarily because the positive impact of the first decade of operation was deemed significant.

OF NOTE:

- Broadcasters and other workers associated with Radio Huayacacotla conduct their own informal studies of local social and economic problems to make sure that they do not lose sight of the plight and perspectives of the listening audience. They also live in the area they serve.

- All members of the work team are Mexican nationals.
- The geography of the broadcast zone includes highlands, forests, plateaus, mountains, and coastal regions. Each of the three pilot agricultural projects is situated in a different climate and at a different altitude.
- The zone covered by the project includes 25 percent of Mexico's towns. About one-eighth of the zone's population is made up of indigenous people, nearly all of which speak Spanish as well as their own Indian language.
- Crops grown in the project area include maize, beans, chili, barley, wheat, alfalfa, lettuce, carrots, potatoes, timber, coffee, tobacco, sugar cane, and fruit. Agricultural development in the area has been hampered by chronic shortages of insecticide and fertilizer.
- Agricultural inputs donated by aid agencies and foundations include a fruit dehydrator, sees, fertilizers, pumps, and insecticides.

REFERENCES:

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"A Rural Radio Programme for Mexico," Beatriz Bracco, Ideas and Action, FAO, No. 199, 1977.

Clearinghouse of Development Communication
April 1979

MASAGANA 99
PHILIPPINES

TARGET AUDIENCE:	Rice producers in 59 Filipino provinces (approximately 900,000 farmers according to official estimates)
OBJECTIVES:	To increase rice yields by supplying farmers with credit, loans, agriculture inputs, and timely information on agricultural concepts and practices
MEDIA:	Radio, comics, booklets, flyers, bulletins, vernacular magazines, newspapers, posters, TV, and interpersonal communication
DONORS/SPONSORS:	Ministry of Agriculture; The National Food and Agriculture Council of the Philippines (an organization composed of 21 Filipino government agencies and banks); Association of Philippine Broadcasters, the U.S. Agency for International Development; and the International Rice Research Institute
DURATION:	Pilot project and research conducted from 1971 to 1973; implementation phase begun in 1973; ongoing
CONTACTS:	Dr. Arturo Tanco, Secretary of Agriculture, Quezon City, Philippines; Domingo F. Panganiban, Director, National Food and Agriculture Council, Quezon City, Philippines; Dr. Emil Q. Javier, Chancellor, University of the Philippines, U.P. at Los Banos, College, Laguna, Philippines; Kenneth F. Smith, OHP USAID Korea, c/o U.S. Embassy, Seoul, APO S.F., CA 96301, USA

ESCRIPTION:

esident Ferdinand Marcos launched Masagana 99 in
ıy of 1973 in a nationally televised ceremony. Calling
ɜ project "a program of survival" in the wake of
gional flooding in 1972 and of a national drought in
72/3, Marcos rallied the nation to cooperate in the
ɜ-growing scheme billed as a remedy to a production
ımp that threatened to deplete the Philippines' foreign
change and work other economic injuries. The not of
gency reflected the fact that the rice shortage that year

had been estimated at 700,000 tons. In terms of the number of farmers involved, the degree of government and private-sector collaboration, geographic sweep, the use of the mass media, reliance up trained extension agents, the spread of new rice-farming technologies, and gains in rice-yields, the project Marcos announced was the largest and most comprehensive in the nation's history.

Masagana 99 has 11 elements. They include (1) a research-based technology package, (2) a scheme for the production and distribution of seeds, (3) a fertilizer allocation and distribution system, (4) a campaign aimed at controlling pests and plant diseases, (5) a credit scheme, (6) a program for distributing irrigation pumps and otherwise improving irrigation systems, (7) a program for increasing the number and reach of mobile agricultural extension agents, (8) a mass media campaign created to spread information and to educate the public on agricultural concepts and practices, and (9) a system of price supports coupled with procurement and grain-storage programs. The remaining two elements, administrative and cross-sectoral, are a focus on carefully defined target areas and a management unit charged with planning, implementing, and monitoring the overall program.

Radio functions as a mainstay of the mass media component of Masagana 99. Its heavy use reflects research findings that radio reaches up to 85 percent of the population and that three out of every four Filipino farmers own a transistor radio. Over 224 radio stations broadcast advice, jingles, and skits on agriculture ten times per broadcast day, while 125 radio stations carry over 50 local agricultural programs. Principal back-up media include instructional comics, booklets and bulletins in the eight major dialects of the country, newspapers (which voluntarily devote ample news space to the project), and instructional promotional posters. TV's role has been limited, consisting primarily of coverage of the project's opening ceremony and of occasional field activities.

The agriculture broadcasters involved in this project serve as more than disc jockeys. They act as information officers in the Provincial Action Committees (the project's basic administrative units), answer queries from listeners, tape interviews with both information suppliers and information users, conduct research related to the broadcasts, and attend community activities related to food production. In addition, they keep daily broadcasting logs, meet weekly with the provincial broadcasting authorities to plan and review programming, and stay abreast of the informational and educational activities of all agricultural and rural development agencies.

In 1977, Masagana 99's emphasis on realizing higher yields and including increasing numbers of farm families were intensified. Since then, the project has been known as Masagana 99 + 10.

RESULTS:

Despite transportation problems, inclement weather, distribution tie-ups, and pest infestation, rice yields in the Masagana 99 area increased dramatically—28 percent from 1973 to 1974, an additional 1 percent in 1975, and another 10 percent in 1976. In 1974/5, for example, yields averaged 3.3 tons per hectare in the project area and 7.7 tons in the areas not covered by the project. Predictably, initial production leaps of the magnitude realized in the project area boosted farmers' gross incomes radically. For example, at the end of the program's first year, one study shows, farmers in three participating provinces (in which individual land holdings averaged slightly over two hectares) enjoyed income gains of 118 percent. Since 1976, the total harvested crop has steadily gone up, and in late 1977 the Philippines exported 25,000 metric tons to Malaysia and Vietnam. Total rice exports, including 1977's and 1978's, are expected to total 149,000 metric tons. The repayment problem, which plagued the program, has grown less severe, but the number of framers participating has dropped to 249,000, and inflation and cost increases of agriculture inputs have wiped out some of the gains made by the majority of participants.

The impact of the media and messages in Masagana 99 has not been evaluated apart from overall impact of the project on production totals and income gains.

OF NOTE:

- The word masagana means bountiful harvest and the 99 of the project title refers to the target yield of 99 *cavans* (1 *cavan* equaled 44 kilos at the outset of the program but has since been adjusted to equal 50 kilos).
- The basic research related to this project was conducted by the International Rice Research Institute, the University of the Philippines at Los Banos, and the Philippines Bureau of Plant Industry. The pilot phase was implemented by the National Food and Agriculture Council of the Department of Agriculture and Natural Resources, whose efforts were supported by the Bureau of Agricultural Extension, IRRI, BPI, and the U.S. Agency for International Development.

- The Management Information System developed in conjunction with Masagana 99 was designed to help project managers overcome numerous administrative problems that typically beset agricultural projects: weaknesses in links between information sources and decision makers, difficulties associated with distinguishing causal factors of production form incidental factors, and problems bearing on the coherence and reliability of information culled from many sources. The MIS adopted includes baseline data, standard indicators on date, "on line" data from the field, regular sample surveys, set procedures for analyzing data, feedback and evaluation, carefully spelled out operating assumptions, and other analytical tools for decision-making.
- The field staff reports to a Provincial Program Officer, who summarizes its comments and relays them first by radio and then by mail to the Management Committee Staff.
- Purchase of consumer goods such as cook stoves, refrigerators, and motorcycles by farm families involved in Masagana 99 have increased so dramatically in some areas that the new variety of rice is sometimes called Honda Rice.

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Clearinghouse on Development Communication
October 1978

RADIO EDUCATIVE/PILOT PROJECT IN COMMUNICATION MEDIA IN ADULT EDUCATION

SENEGAL

TARGET AUDIENCE:	Senegalese farmers, livestock producers, fishermen, and others (roughly two million people)
OBJECTIVES:	To provide food producers with practical information and with the opportunity to express their opinions systematically and effectively; to provide technical training
MEDIA:	Radio, correspondence, interpersonal communication, audio-visual, and T.V. broadcast
DONORS/SPONSORS:	The Senegalese Government (sole supporter since 1973) and UNESCO (until 1973), with technical assistance in the preliminary stages from the governments of Canada and France
DURATION:	Initiated in 1968; ongoing
CONTACTS:	Boubacar Sock, EARO UNICEF, P.O. Box 44, 144 Nairobi, Kenya; Henry R. Cassirer, Les Moulins, 74290 Menithon-St. Bernard, France; and Radio Educative, Office de Radio/Television du

DESCRIPTION:

Senegal was the only African nation to take UNESCO up on the offer made in the early 1960's to establish "a pilot center for the production and testing of audio-visual materials and equipment for adult education" in Africa. The project that subsequently emerged had two dimensions: Radio Educative Rurale (now called simply Radio Educative) and a five-year television component (which ended in 1969). The TV broadcasts, 121 programs in all, were directed to 250 women in Dakar and remained strictly experimental. The radio broadcasts, in contrast, were originally intended for a potential audience of 800,000 (the farm population in the three Wolof-speaking administrative regions reached by the pilot broadcasts, and late became nationwide). The primary aims of the project were to test the use of modern media in the context of adult education in Africa, to create a demonstration center of possible use to other

developing countries, to train local people to become technicians and produce, and to help restore to ordinary people the sense of personal power eroded during the decades of colonial rule.

The complexity of its mandate and numerous administrative bottlenecks within the Senegalese bureaucracy together kept the radio component from getting into full swing until 1968, when President Senghor himself intervened. Calling for government reorganization and cooperation, Senghor provided the missing ingredient: committed leadership. Under his guidance, Radio Educative became an information duct, a change agent, and a government watchdog.

Under the project design finally implemented, 57 radio listening groups were established in the pilot provinces of Thies and Diourbel in the Sine Saloum. Programming was to focus on topics of local and pressing concern—namely, the production and marketing of groundnuts, the responsiveness of government agencies to the peasant farmers' needs, the ways in which debts are incurred and repaid in the villages, and other critical social and health problems. The groups were led by regional staff members of the department of "Animation Rurale" (which has since merged with other government departments) or by animators recruited as volunteers in the village, each of whom took a three-day training course in group dynamics. The third element of this communication system, farmer feedback, took the forms of recordings made in the field and letters. Members of listening groups dictated letters, with the handful of literate members doing double duty as scribes, to the higher-ups in government and to the President himself. In these letters, the peasants aired their complaints, exposed what they believed to be cases of government ineptitude, and took the government to task for standing behind unfair or short-sighted policies—all of this they did without fear of censure with the intention of making themselves heard.

RESULTS:

The most meaningful indicators of Radio Educative's initial impact is probably its effect on national policy. As a direct outcome of the "radio dialogue" begun in 1968, a flood of letters poured into government offices, a flood that eventually moved President Senghor to standardize the price given to groundnut producers (to the great advantage of the producers in remote areas, who were once discriminated against in the marketplace) and to annul in 1970 peasant debts contracted in the purchase of seeds, agricultural equipment, and supplies.

A second indicator of Radio Educative's worth is its expansion and its continuation. Radio Educative has operated without any foreign assistance sine 1973. While some observers feel that the growth in the number of people participating in listening groups has not kept pace with the growth in the number of individual listeners and that the potential of the broadcasts to promote community participation is thus not being realized, overall response has by all estimates remained excellent. More than 500 villages have sent in thousands of letters, and the "malaise *paysan*" is showing some signs of crumbling in the face of incentive for action and participation.

Over time the listening audience has dispersed, with group listening giving way to individual listening. Reasons for this shift include the disappearance of Animation Rurale activity, Radio Educative" lack of personnel and transport, and the boom in cheep transistor radios. The tendency has not reduced the project's impact or emphasis on feedback, however.

OF NOTE:

- Since anyone who understands Wolof can profitably listen to Radio Educative's broadcasts, the actual audience has always exceeded the target audience. In addition, programs in Peul, Malinke, and other languages are now being prepared.
- About 70 percent of Radio Educative's programs are recorded outside the studio.
- Broadcasting in Wolof, which many Senegalese peasants speak, presented special problems to the less than astute moderator of a listening group since Wolof has a special feature: a code for transmitting messages intended only for the ears of the initiated.
- Three Wolof concepts used to interpret the peasants' statements are "TAWAT" (complaining), "DIGUAT" (disputing), and "THIOW" (making a fuss about a problem).
- Some government employees have complained about Radio Educative, claiming that peasants have no need to write the authorities when the authorities' representatives are on hand to hear them out or that it is disrespectful and counterproductive to challenge the existing administrative hierarchy.
- At a pan-African communication conference in Dakar in 1977, Senegal's President Senghor said that "educational radio should above all help peasants to cultivate the most authentic African values—courtesy, a liking for work, and a sense of solidarity—at the same time that it instills in them the sense of thrift, organization and method, qualities more properly European."

- In the early years of the project, some Senegalese viewed it as a UNESCO communication laboratory, while UNESCO employees tended to view the project as a joint venture of mutual benefit to both UNESCO researchers and the Senegalese people.

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"Radio in an African Country: A Description of Senegal's Pilot Project," Henry R. Cassirer, in Radio for Education & Development: Case Studies, Vol. II, World Bank Staff Working Paper No.266, May 1977.

Communication & Rural Development, Juan e. Diaz Bordenave, UNESCO, Paris, 1977.

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Clearinghouse on Development Communication
April 1978

THE RADIO FARM FORUM PILOT PROJECT
THAILAND

TARGET AUDIENCE:	Thai farmers and the agricultural extension service
OBJECTIVES:	To test effectiveness of the radio forum concept in increasing two-way communication between farmers and Thai agricultural extension agents.
MEDIA:	Radio and publications, reinforced by interpersonal communication
DONORS/SPONSORS:	The Department of Agricultural Extension (DOAE) of the Ministry of Agriculture and Cooperatives of the Royal Thai Government, and the UNDP Development Support Communication Service
DURATION:	Conceived in 1968; first executed in 1975; currently being expanded to cover five provinces in 1977 and 15 provinces in 1978
CONTACTS:	Mr. Udom Chusuvan, Chief of Agricultural Radio Broadcasting Subdivision, Department of Agricultural Extension, 2143/1 Phaholyothin Road, Khet Bangkhen, Bangkok 9, Thailand

DESCRIPTION:

Although the Radio Farm Forum Project was conceived in 1968, implementation was delayed several years while the DOAE was reorganized. In 1975, a pilot project was conducted to test the applicability of the radio forum concept to Thailand's farming region. After the study area was systematically selected, listening groups were formed with the cooperation of the village headmen. This was followed by peer-selection of four Radio Farm Forum leaders in each of the eight village groups in the project. Finally, training programs for the local forum leaders were activated.

When the parts of the project were in place, weekly radio programs were broadcast. After each half-hour program, village listening group discussed the content of the program and of supplementary printed materials prepared by DOAE. They were encouraged to comment on both the programs and the literature and to find local

practical applications for the ideas and practices both mentioned. Problems that could not be worked out among the village listening groups were referred via the weekly reports prepared by the RFF leaders to the extension officer of the DOAE and to other people or organizations able to offer assistance.

Responses to the listening groups took three basic forms. Radio broadcasts and publications were used to answer some questions, while DOAE field staff and other specialists visited the villages to solve other problems. A third type of contact involved whole groups in trips to seed stores, to university research stations or to demonstration pilots, and in both short seminars and film-showing sessions.

RESULTS:

The Radio Farm Forum Project increased the flow of information between farmers and extension agents in both directions. The extension agents saw the value of making regular and frequent contacts with farmers and enjoyed the sense of continuity the program gave them. For their part, farmers tended to rely increasingly upon the agents once they came to feel that that agents were dealing with their problems and needs on a timely basis. Moreover, because the messages dealt with specific problems, the farmers tended to remember them. Accordingly, the agents came to take more and more satisfaction in their work. In short, a felicitous self-reinforcing dynamic evolved.

More generally, the project succeeded in organizing interest groups to solve shared problems and in demonstrating the effectiveness of reinforcing consistent messages through various communication channels. It showed the agents that the program was feasible and the farmers that it was desirable. Indeed, farmers from areas adjacent to the radio project inquired about and requested similar programs.

OF NOTE:

- The Radio Farm Forum Project successfully combines with an FAO-sponsored project improve irrigated agriculture in northeastern Thailand. In seeking the joint cooperation of various government departments (the Ministry of Commerce, the Rice Bureau, etc.) and of various international agencies, the project may also have opened up or strengthened intra-governmental and inter-governmental communication lines.

- Farm forums in many cases became forums for other local problems.
- Village headmen were enlisted to help lend legitimacy to the project, and students from local university and agricultural college helped conduct the field surveys.
- The success of the Radio Farm Forum Project prompted the Thai Government to consider integrating the radio forum approach into other activities. The project itself also led to the government's self-appraisal of its capacity to evaluate such efforts.

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Summary Report on the Radio Farm Forum Pilot Project," (RB #336), Supalak Purnasiri and Robert S. Griffin, UNDP/DSCS, Bangkok, Thailand, November 1976.

Clearinghouse on Development Communication
June 1977

ETV SAMOA
AMERICAN SAMOA

TARGET AUDIENCE:	Samoan children of school age
OBJECTIVES:	To upgrade teaching, to make the curriculum used in Samoan schools more relevant and useful, and to foster the use of English to promote bilingualism
MEDIA:	Television and print, reinforced by interpersonal communication
DONORS/SPONSORS:	The American Samoan Department of Education with funds appropriated by the U.S. Congress
DURATION:	Proposed in 1961; in operation as of 1964; ongoing
CONTACTS:	Mrs. Mere Betham, Director, Department of Education, Government of American Samoa, Pago Pago, American Samoa 96799; James Fellows, President, National Association of Educational Broadcasters, 1346 Connecticut Ave., N.W., Washington, D.C.

DESCRIPTION:

H. Rex Lee, governor of American Samoa from 1961 through 1967, commissioned the National Association of Educational Broadcasters (NAEB) to prepare a plan for a new Samoan school system in 1961. The blueprint for that system called for the construction of 24 new campuses, the consolidation of the island's one-room village schools, and the erection and operation of a VHF television studio and production center. Lee accepted the plan enthusiastically because its impact would be immediate, it did not call for the displacement of the classroom teacher, it was cheaper than plans calling for maintaining foreign faculties, and it remained true to Samoan egalitarian ideals.

English language instruction formed the core of the Samoan project at its inception. Curricula were developed by working committees who reported to a council composed of the director of education and his staff, the principals and vice-principals of the local schools, and the supervisors. Lessons were prepared in the production center by Americans assisted by Samoans-in-training. These lessons were distributed weekly and were keyed to daily televised presentations (lectures, demonstrations, and film clips designed to

produce active student participation) delivered by "core teachers." Follow-up activities were then conducted by classroom teachers using instructions distributed with the lessons. Four kinds of feedback mechanisms were employed; classroom teachers periodically forwarded student papers to the TV teachers, the TV teachers visited the classrooms from time to time; both classroom teachers and school principals submitted regular feedback forms to the central office; and principals also communicated immediate problems via two-way radio.

By 1965, and aver of 170 school telecasts representing 53.5 hours of air time and an estimate 180 hours of studio time were being produced each week. At the same time, more than 60 hours of pre-recorded lessons, primarily language drills, were re-broadcast weekly. By 1966, an evaluation had become part of the new program and both the curriculum and classes had been reorganized into four levels that corresponded roughly to grades one and two, three and four, five and six, and seven and eight. By 1970 about 10,000 students in grades 1-12 were attending public schools in American Samoa. Elementary school students were receiving televised lessons in science, art, physical education, mathematics, and language skills. In addition, students in grades9-12 used ETV in conjunction with classes in home economics, shop, and business.

RESULTS:

While no baseline data were gathered, achievement tests devise on the mainland and administered periodically show that the ETV system has met some of the goals it was designed to further. Students who graduated in 1976 scored on average at the mid-ninth grade level in English comprehension, while 1975-graduates of the system tested at the mid-eighth grade level. (In 1961, Samoan graduates scored at fifth-grade levels on comparable American-made tests.) However, those in the ninth-grade in 1976 scored lower (a difference of a year in terms of grade levels) than ninth graders had in 1975.

In recent years, the use of ETV in the classroom has been optional, and many teachers use it only sparingly. Samoan has become the language of instruction and the ideal of bilingual education has given way to the reality that English will probably remain a widely used second language. While the ETV station is still supported by the Department of Education, its production staff (which once consisted of 30 members) now numbers four, the number of broadcast channels has been reduced from six to three, and little new materials is being produced. The station's first-rate equipment is still in excellent

condition, but it is not utilized at full capacity. While no hard data exist on the cut-back in services and emphasis, observers cite political factors (chiefly the priorities and length of stay of the governors), budgetary constraints, climatic and logistical problems, and the passive resistance of Samoans to "Americanization" as major determinants of ETV's past and future impact in Samoa.

OF NOTE:

- The first high school students to participate in the ETV classes had been led by U.S. teachers who were losing their Samoan jobs to think ill of the use of television in the classroom.
- The ETV channels were also used to broadcast agricultural information in conjunction with Samoa's extension services.
- The use of the terms "receiving teacher" and "follow-on teacher" in ETV's first years alienated some classroom teachers, who felt that the labels conferred second-class status upon them.
- The National Association of Educational Broadcasters declined to renew its management contract with the Government of American Samoa in mid-1969 after a series of appropriations abuse involving Department of Education funds crushed the ETV staff's morale.
- Although "Dick and Jane" texts were scrapped in favor of those whose stars were Sua and Tuna, critics claim that classroom materials still retain an American flavor of dubious worth.

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Clearinghouse on Development Communication
October 1977

BRAC'S SULLA FUNCTIONAL EDUCATION PROJECT
BANGLADESH

TARGET AUDIENCE:	Nonliterate adult villagers in Bangladesh's Sulla district
OBJECTIVES:	To combine literacy training with education in practical work-related subjects and with social consciousness-raising
MEDIA:	Print, posters, charts, dramatization, and interpersonal communication
DONORS/SPONSORS:	Bangladesh Rural Advancement Committee (BRAC), with support from OXFAM (Canda), OXFAM (America) and technical assistance from World Education
DURATION:	Implemented in May 1974; restructured in January 1976; ongoing
CONTACTS:	Md. Shahid Hossain Talukder, Chief Trainer, Bangladesh Rural Advancement Committee, 66, Mohakhali C.A., Dacca12, Bangladesh; World Education, 251 Park Avenue South, New York, New York 10010, U.S.A.; Leon Clark, Population Reference Bureau, 1337 Connecticut Ave., N.W., Washington, D.C. 20036, U.S.A.

DESCRIPTION:

BRAC's Sulla Project, a pilot project in functional education, was designed to engage students and teachers as equals in an effort to examine their values and their environment as a first step toward constructive action. Based upon Paulo Freire's assumption that traditional education tends to cripple learners by making them dependent upon experts for answers (and launched after a more conventional adult education program in BRAC's project area had failed), this experiment combines literacy training with both practical education and consciousness-raising. The courses represent it developers' collective experience as part of the community and embrace literacy, numeracy, agriculture, animal husbandry, family planning, nutrition, health and hygiene, pisciculture, the dynamics of exploration, and the origins of social prejudice.

BRAC organized a Materials Development Unit (consisting of an education and training adviser, an illustrator, three writers, and a typist) in Dacca in May of 1974. At the same time, it enlisted a functional education coordinator and a field statistician to evaluate the project's field of activities. A month later a U.S. consultant conducted a 19-village survey to identify the problems, needs, and interests of the target audience. Then two other preparatory activities took place: the training advisor and the functional educational coordinator visited functional-education classes in Thailand and India while an education specialist designed courses and teaching methodologies for the project. Classes began in November of 1974 after selected teachers had been trained in brief, intensive sessions. (In all, about 60 training centers have now been established in Sulla.)

Posters depicting everyday problems formed the basis of the discussion that in turn formed the basis of the courses. Each group of 20-25 students—who met in village community centers (Gonokendra) or homes—broke into smaller groups to discuss the issues depicted on the posters. The small groups then reported their main ideas to the whole body, which continued talking until tentative conclusions were reached or a plan of action was developed. After these 30-45 minute discussions, the facilitator introduced the literacy segment of the session, first by pointing to the key word under the poster illustration, then by asking the participants to read aloud a series of phonemes (sounds) derived from the key word. The participants then made their own words by combining various sounds. Worksheets and games were used in follow-up activities.

RESULTS:

The drop-out rate of the first cycle of the Sulla Project was 59 percent, while that of the adult education program that preceded it was 95 percent. Moreover, many of the drop-outs completed more than half the course and thus ostensibly acquired some reading and computational skills. Fifty-four percent (591 learners) of all participants in the Second Cycle (June 19755 to January 1976) completed the course; and, again, a high percentage of those who did not finish managed to do more than half the coursework. While the difference between the participation rates of the First Cycle and that of the pre-project effort reflect flood-related problems as well as pedagogical ones, the difference between the drop-out rates of the First and Second Cycles is probably a reflection of the extensive revision of the curricula and teaching methodologies that took

place between the two cycles. Migration, rain, and the seasonal demands of agriculture also influenced participation rates, particularly in the First Cycle when the *boro* crop had to be planted.

While BRAC made feedback reports of the Sulla Project from the beginning and later involved the field staff systematic observation of the classrooms, it recognizes that drop-out rates and classroom evaluation cannot adequately measure the project's success. Accordingly, it conducted a one-year anthropological follow-up study, the result of which have not yet been published.

OF NOTE:

- In the belief that recruiting local personnel was more important than recruiting highly trained people, BRAC relaxed the educational requirements for some teachers.
- Twenty-four of the first 80 lessons developed were tailored for the separate needs and interests of men and women. In the Second Cycle fewer lessons were addressed exclusively to one sex.
- Drawing on its experience with Sulla Project, BRAC has trained representative from more than a hundred voluntary and government agencies engaged in development work.
- Some of the materials developed for use in Sulla missed the mark when used in other parts of Bangladesh. For example, flooding—a fact of life in Sulla—worked as a discussion topic there but not in Rajshahi, where floods are not a problem. Other topographical, climatic, social, and occupational differences made revising the curricula necessary.
- By January of 1977, BRAC was producing its self-developed materials—charts, lessons, exercise sheets, games, and teachers' manuals—on a large scale and marketing them to other voluntary and government agencies involved in functional education.

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Clearinghouse on Development Communication
October 1977

ETV MARANHAO
BRAZIL

TARGET AUDIENCE:	Disadvantaged students in grades 5 through 8 (approximately 94,000 students in its first nine years of operation)
OBJECTIVES:	To use television classes to provide public-terminal education where it had not previously existed
MEDIA:	TV, print, and interpersonal communication
DONORS/SPONOSRS:	Fundacao Maranhese de Televisao Educativa, with funds from state and federal education departments
DURATION:	Begun in 1969; ongoing
CONTACTS:	Professor Joao Vincente de Abreu Neto, Director, Fundacao Maranhese de Televisao Educativa, San Luis, Maranhao, Brazil

DESCRIPTION:

The severe lack of public school facilities for students beyond the 4th grade in one of Brazil's poorest states provided the background and impetus in 1969 for a dramatic experiment: television was to present secondary learning materials, trained monitors were to provide the psychological and instructional support for learning, and students were to be grouped into study teams for peer teaching. Educational needs were dire at all levels, but students in grades five through eight were to be given special attention on the assumption that adolescents stand in greatest need of the expanded social and job opportunities extra schooling can provide. Since that aim of this experiment was to give students practical skills necessary to be useful to the community, science and mathematics were to dominate the curriculum.

The ETV Maranhao program emphasizes active over passive learning, peer learning of traditional teaching. The students divide themselves into 6 or 7 study groups per class to listen to the four programs (each of which is followed by 30-to-40 minute classroom sessions) broadcast each day. Peer support and tutoring give a strong motivative dynamic to the learning process. Students who need special help are identified by the class monitor, who gives the necessary support.

Monitors meet regularly with supervisors to upgrade teaching techniques, to develop their skills in group dynamics, and to receive help with specific problems.

ETV Maranhao uses its own facilities to produce and transmit programs. Tapes are made daily in the studio. In short supply, these tapes are re-used, which necessitates re-taping classes each year. Constant evaluation of feedback provide input for changes in the TV material.

ETV Maranhao gradually has expanded its activities. It now includes a secondary-school course for out-of-school adults, a literacy program in collaboration with MORBRAL, and cultural programming for more advanced students.

Quality of TV reception, both of image and sound, has been a problem, and the failure to exploit fully the visual potential of TV is a drawback. A predictable decline of interest and creativity after the project's first years has also militated against unqualified success, as have the administrative problems associated with lateral expansion of the project.

RUSULTS:

ETV Maranhao's aims of providing increased schooling for grades 5 to 8, redressing the lack of teachers for these grades, and providing trained labor for the community have all been realized. The drop-out rate is low (below 10 percent), the year-end exam results are exceptional (over 90 percent passing), and 60 percent of all ETV Maranhao students who take the upper-secondary entrance exam pass it.

The costs of ETV Maranhao were initially high, primarily because equipment purchases have to be figured in the start-up costs and because prototypical projects entail higher than average development costs. Utilization costs, as opposed to fixed costs, however, have been extremely low and the economic viability of the system will increase with its increased utilization. Costs per student have averaged slightly less than those associated with available educational alternatives, though none of the alternatives is strictly comparable.

OF NOTE:

- Before 1969, three-fourths of all secondary education was private in Maranhao; only two schools were public.
- The students' study groups evolved into after-school clubs—artistic, scientific, religious, social, and

political. Students of the scientific club put on a yearly science fair for the community.

- While educators and TV producers prepare the programs jointly, the educators usually have final say.
- One of the most urgent problems facing ETV Maranhao's administration is a high level of absenteeism among the teachers, ostensibly because their salaries (which are set by state authorities and not by the project administrators) are so low.
- Some analysts claim that the project's current expansion will test ETV Maranhao's flexibility—in question since the experiment has so far conformed closely to the model established at the outset.
- ETV Maranhao's two studios are considered under-equipped.
- ETV Maranhao was expressly designed to meet the needs of children who live in slums. Classes are free of charge and located within walking distance of the students' homes so the beneficiaries need not pay transportation costs.

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Clearinghouse on Developmental Communication
January 1979

THE MOBRAL ADULT LITERACY EXPERIMENT
BRAZIL

TARGET AUDIENCE:	Disadvantaged students in grades 5 through 8 (approximately 94,000 students in its first nine years of operation)
OBJECTIVES:	To use television classes to provide public-terminal education where it had not previously existed
MEDIA:	TV, print, and interpersonal communication
DONORS/SPONOSRS:	Fundacao Maranhese de Televisao Educativa, with funds from state and federal education departments
DURATION:	Begun in 1969; ongoing
CONTACTS:	Professor Joao Vincente de Abreu Neto, Director, Fundacao Maranhese de Televisao Educativa, San Luis, Maranhao, Brazil

DESCRIPTION:

The reorganization of Brazil's adult literacy program in to the massive MOBRAL program was triggered by a statistic that emerged during the1970 national census—some 18 million Brazilians over the age of 15, one-third of the total adult population, could not read or write. Established by the government as a financially and administratively independent organization in September of 1970, MOBRAL represents a comprehensive attempt at promoting the practical literacy skills needed to increase the student's income, self-respect, and community involvement. Specifically, it is aimed at reducing the illiteracy rate from the 1970 level of 33 percent to 10 percent by 1980 (the rate in 1977 was 14.2 percent). The manifestation of a strategy rather than of a doctrine, the nationwide program takes many forms and varies form municipality to municipality. A pyramidal administrative structure and the centralized mass production of teaching materials do, however, provide the program with the motivating force and economic advantage of a national development effort.

MOBRAL consists in part of ongoing projects and in part of short-term experiments in adolescent and adult education. Permanent projects include the Functional Literacy Program, the Integrated Education Program, the

Self-Teaching Program, the Cultural Program, the Diversified Community Action Program, the "Sports for *All" campaign, and the Technology of Scarcity Project.* Experimental programs have addressed a variety of pedagogical and evaluative concerns: how to design stop-gap courses for newly literate people, how to make the most of radio in literacy efforts, how to measure the impact of literacy teachers' private inhibitions on the progress of their students, etc. Of special interest among such experiments are the Radio Projects (which was begun in 1972 to offer over the radio to tens of thousands of potential literacy teachers training in the rudiments of linguistics, classroom dynamics, student evaluation, and so-called "new" math) and the planned introduction of TV into post-literacy classes in late 1978.

The municipality is MOBRAL's basic administrative unit, and all of Brazil's nearly 4,000 municipalities take part in the program. Each Municipal Committee executes the programs conceptualized at central, regional, and state levels; it also raises some funds, initiates and coordinates social activities relate to the literacy classes, and engages the literacy teachers (all of whom work part-time), monitors and local agents charged with organizing community development activities in conjunction with the literacy program and the enrolling students.

The literacy teachers come from the ranks of primary-school teachers, university students, and other members of the community. About half their numbers have received only four years of formal education, most are between ages of 18 and 24, and the annual turnover rate is over 30 percent. These teachers rely on teaching kits that are put together as a noncommercial "seeding" enterprise by book publishers located in the capital. They also have access to the service of mobile libraries-AV vans. Typically, they hold classes for two hours a day, submit monthly attendance sheets, collect pay on the basis of student enrollment, conduct periodic student evaluations and self-evaluations, and participate in social and cultural events connected with the literacy program, community education, and development.

RUSULTS:

The trial-and-error evaluations conducted during MORBRAL's early years have gradually given way to more systematic and reliable measuring procedures. Originally, only indirect evaluations—those made primarily on the basis of documents—and on-the-spot visits were conducted routinely. Now, the Subsystem of Overall Supervision (established in 1973) carries out two types of evaluation: (1) a vertical type in which one part

of the system is judged by another that is better and (2) self-evaluation, which is considered a component of staff development and training. Both types take place among the lines laid down in the Overall Supervision Manual published in 1972, and both take place at all project levels.

To gauge the program's success, MOBRAL's staff has devised a formula for measuring productivity in light of everyday circumstances. To put into perspective the drop-out problem associated with virtually all adult literacy programs, MOBRAL evaluators expressed total productivity as the ratio between number of students passed at the end of the five-month program cycle and the total number of "pupils under agreement" (potential participants.) MORBRAL'S short-term drop-out rate has not exceeded 15 percent since the fist year of the program. The ultimate drop-out rate decreased remarkably between 1971 and 1976 (22 percent to 2 percent). In 1977 the ultimate drop-out rate rose to 24 percent because some administrative difficulties left municipal bases without support for the development of their activities. From 1971 to 1977, the completion rate oscillated between 63 percent and 40 percent (average: 49 percent). In terms of sheer numbers, 507,567 people participated in MOBRAL's Functional Literacy Program in 1970, and 3,893,338 took part in 1977. From 1970 to 1977, almost 30 million people participate in MOBRAL's Functional Literacy Program and over 11 million became literate (average productivity: 38 percent).

Among the qualitative effects of the program have been (1) the design and implementation of new programs (cultural activities, professional training, self-teaching, health education) aimed at responding to the participants' needs and aspirations expressed during and after the completion of the Functional Literacy Course; (2) the creation, testing, and implementation of new forms of human resources training in the field of Adult Education, (for supervisors, monitors, teachers, etc.); (3) the implementation of a series of programs and projects using new educational technologies, mostly for training purposes; (4) the reinforcement of local and traditional Brazilian culture; (5) the promotion of practical techniques for enhancing daily life and work; (6) the awakening of interest among the Brazilian "intelligentsia" in Brazilian Portuguese and in mass literacy; (7) the motivation of adults to educate their children in recognition of the importance of education in the development and integration of the national society, and (8) the adoption of MOBRAL's organizational structure by other Ministries and national, regional, and local organizations.

OF NOTE:

- The keynotes of MOBRAL's administration are decentralization, the delegation of authority, self-evaluation, and an emphasis on staff training.
- The integrated cooperation of national and regional agencies and of local institutional and people is hearteningly complete. A handful of examples among scores include the Armed Forces (which have provided storage space for teaching materials), industries that have given their employees paid leave to take MOBRAL courses, and a coalition (consisting of the Amazonas Commercial and Industrial Association, the Technological University for Labor, and the Intensive Program for Manpower Training) that built nine boats for MOBRAL's use in the Amazon region.
- By 1977, one of every six Brazilians over 15 had participated in the MOBRAL Program
- To encourage people to retain their literacy skills, MOBRAL publishes a newsletter and other easy-to-read materials, operates mobile libraries, and organized libraries and reading rooms.
- Incentives for participation and performance include prized for teachers whose classes have low drop-out rates, awards for excellent newspaper coverage of MOBRAL activities, and small cash payments for individuals who get an illiterate person to enroll in the program.
- Class size is flexible, but commonly MOBRAL study groups consist of 25 to 30 students each.

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Clearinghouse on Development Communication
October 1978

MOVIMENTO DE EDUCACAO DE BASE
BRAZIL

TARGET AUDIENCE:	Originally, illiterate peasants in Northeastern Brazil (potentially, about 24 million adults), later expanded to include peasants in other regions
OBJECTIVES:	To help educate, politicize, and motivate adults without access to schools and health facilities (particularly by means of providing literacy and numeracy training) and encourage the formation of base communities
MEDIA:	Radio, print, and interpersonal communication
DONORS/SPONSORS:	National Bishops Conference of Brazil, Brazil's Ministry of Education and Culture, Catholic and other aid-giving organizations in Europe and North America, and Brazil's Ministry of Health (1962-64)
DURATION:	Begun in 1961 as a literacy program; re-oriented in 1965 and again in 1971; ongoing
CONTACTS:	Sr. Anne Marie Speyer, Movimento de Educacao de Base, SCS, Q.3, Bloco A, No. 79, Ed. Joao Paulo II, Brasilia, Brazil, 70 300

DESCRIPTION:

From its inception in 1961, Movimento de Educacao de Base has been a sectarian effort to fulfill the basic rights for the disenfranchised by offering practical training in problem-solving. But little besides the project's reason for being has remained unchanged. The original focus on literacy training gradually shifted to an emphasis on demystifying underdevelopment, albeit through literacy programs. Originally modeled after ACPO's Radio Sutatenza in Columbia, MEB no longer depends heavily upon the use of radio. Then too, the size of the project, the MEB curriculum, and MEB's relationship with the national government have all changed with the political weather, with the military coup of 1964 in particular.

MEB's approach and its problems differ from those of many attempts within Latin America to mobilize the mass media for development. Instead of simply promoting progressive practices in the name of development, the

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project workers devote themselves to helping peasants perceive the roots and the dimensions of underdevelopment. Only then, the Freirean logic goes, can people work out and adopt solutions they can live with. Another distinguishing feature of this project is the use of the mass media. In MEB, books and radio broadcasts are used to support, not to replace, personal interaction. The backbone of the program is the *campones* (peasant farmers') study group. At weekly meetings, radio broadcasts on agriculture, nutritional, labor practices, and other practical topics are discussed with the help of group animators who use role-playing and other action-oriented techniques to draw group members into discussions of painful real-life problems.

A decentralized organization, MEB operates at four levels. The highest is the national team in Rio, whose members report to the six bishops appointed to the national Directive Council by the Catholic Bishops Conference and to the representatives from the Ministry of Education who sit on the Council. Divided into an administrative sector and technical-pedagogical sector, the national team organizes new *sistemas* in response to local initiatives, sets policy, selects and trains personnel for the local teams, and handles other administrative procedures. It leaves all program development, however, to the local teams. The basic regional administrative unit, the Sistema Educativo, usually covers a single Catholic diocese and contains many radio schools. The third level is the local team, which plans and carries out the area's basic education program. Typically, this trained team of teachers, social workers, and others call the region's most developed center its homebase and travels from there into the outlands. Animators make up the fourth level of the educational system. They are nominated by members of their community, trained locally, and given the responsibility of sparking dialogue and activities in their communities.

RESULTS:

MEB has suffered grave setbacks, but the project has nevertheless affected the lives of hundreds of thousands of Brazilians. An evaluator charge with assessing the efficiency of the project's first decade of operations found that the more than 5.000 radio schools in the MEB network as of 1964 had helped some 400,000 peasants learn to read. Yet, the same researcher estimated, no more than 100,000 *campones* acquired literacy skills through MEB between 1964 and 1970, most likely because the government that came to power in 1964 placed little premium on grassroots participation in social change.

Since 1970, MEB's attempts at self-evaluation have consisted primarily of measuring the demand for courses, not assessing behavior changes brought about by MEB courses and activities. As of 1976, plans for conducting evaluations before, during, and after course shad been made, but so far post-course evaluation has not been on a par with needs assessment and enrollment analysis. Only a crude picture of the project's impact can be pieced together from registration statistics (which show, for example, that the program called "community activities with a religious orientation" enjoyed far greater popularity than MEB's agricultural or health programs). The total number of participants in MEB is difficult to gauge since some listeners fall into more than one category of student. In 1977, about 15,000 people registered for the regular academic courses, while special programs involved just under 162,000 radio-listeners and non-school education programs had over 171,000 registrants.

OF NOTE:

- MEB's "animation" activities have included organizing soccer clubs, agricultural work, and rural syndicates
- Potential local animators were observed by MEB staff members in their hometowns. Only candidates who did not condescend to nor patronize their fellow townspeople were selected for training.
- In 1968, MEB received UNESCO's Reva Pahlivi Prize for its high-caliber work in behalf of and with *campones*.
- Radio's use in the project has taken a back seat to that of print and discussion. Unlike that animators, the medium is not regarded or used as a primary agent of social change.
- Northeaster Brazil was selected as the original project site and remains the focus of project activities because it is Brazil's poorest region and because, according to a 1975 estimate, over half the people in the region cannot read or write. The Amazon region is also the scene of intensive MEB activity.

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RADIO ECCA
CANARY ISLAND

TARGET AUDIENCE:	Spanish and Latin American adults (more than 100,000 students in its first ten years of operation)
OBJECTIVES:	To provide inexpensive and practical education to adults as a means of promoting personal and community development
MEDIA:	Radio, print, and interpersonal communication
DONORS/SPONSORS:	Cadena de Ondas Populares (COPE) under the Diocese of the Catholic Church of Spain
DURATION:	Begun 1965; ongoing
CONTACTS:	Luis Espana Cepeda, Radio ECCA, Avda. Mesa y Lopez, 38, Apartado 994, Las Palmas de Gan Canaria, Espana

DESCRIPTION:

Radio Emisora Cultural de Canarias (ECCA) was founded by Jesuits to meet the educational needs of the adult who never had the opportunity or time to attend school or whose education has been cut short. One of the 45 stations under the jurisdiction of the Catholic Church is Spain, Radio ECCA began broadcasting in 1965. From the beginning, its directors and staff have been dedicated to "tri-dimensional education"—a combination of radio broadcasts, printed materials, and activities conducted by specially trained "orienters"—that appeals simultaneously to the mind, the emotions, and the spirit and that helps the student draw upon and legitimate experience acquired outside the learning environment. This extremely idealistic goal is paralleled, however, by the more practical objective of giving the majority inexpensive access to ECCA courses. Consequently, ECCA's self-acknowledged challenge is to keep quality and quantity balanced.

The educational radio broadcasts (which total 117 hours of RM and AM programming each and which are aimed on weekdays only) and the printed lessons (which are printed in Radio ECCA's own production facilities) reinforce and enhance each other. All printed matter is designed to proceed systematically form the easy to the difficult, the know to the unknown, the particular to the

universal (or vice versa), and concepts to explanation (or vice versa). Texts and workbooks have tear-out pages that the student completes and turns in as homework, and students are encouraged to annotate and underscore potential points in the course material.

The tasks of preparing and taping lessons, taking administrative responsibility for 733 learning centers, and both culling and interpreting feedback from post-course questionnaires falls to the program's 50 "studio" teachers, most of whom are former public-school teachers selected by ECCA for their professional excellence. These specialists also supervise of 508 extension teachers who are charged with review the material covered during the broadcasts, passing out and collecting homework, correcting students' papers, helping the students relate toe course material to their daily lives, and collecting weekly fees from participants.

While student are treated with the respect that the Radio ECCA staff believes that adult learners deserve, the learning pace is slow since most students cannot afford to devote more than a small fraction of their time to study. During the first primary-level classes, for example, the students learn how to use a pencil and how to execute the simple lines that form the letters of the alphabet. Gradually, they learn to make the letters and to combine consonants and vowels to create words. By the end of the first course, most students can decipher and write simple sentences. In all, Radio ECCA offers courses in business and other work-related subjects such as agriculture, religious and secular culture, literacy, and English. Each course lasts from one to three years, and students may earn certificates at two levels; primary studies and graduate studies.

RESULTS:

Radio ECCA uses attendance records to measure its impact. From the time of the first broadcast, it has kept tabs on the number of students it serves and made estimates of its unenrolled listening audience. It has also periodically refined its method of record keeping. Evaluation of student achievement and follow-up studies of the radio courses' impact on students' lives have, however, been more haphazard and impressionistic.

In the first year of broadcasting, Radio ECCA had 1,401 active participants. By the end of its tenth year, the cumulative total had reached 107,599 (excluding the unenrolled audience). During its 11th year, the station enrolled student number 118,117. In Gran Canaria and on Fuertiventura, the percentages of the total population that listened to Radio ECCA reached 20.35 and 21.34,

respectively, probably because the station staff devoted more work to these areas. The number of students active at any one time peaked in 1970 at 23,507. The slow decline since then to 20,263 students in 1975 (excluding 8,493 students from the Iberian peninsula) may be statistical quirk that reflects changes in record-keeping. (At any rate, only those students who attend regularly and who pay the weekly fee are counted present, so the attendance figures are no doubt conservative.) Since the students under 14 years of age were categorically dropped from the program in 1976 on the assumption that children ought to be attending existing traditional schools, a further reduction in course participants can be expected.

A secondary indicator of Radio ECCA's success is its financial status. While no student is charged more than 100 pesetas (U.S. $1.25) and the average charge is less than 50 pesetas each week, tuition fees met 64.4 percent of the station's total expenses in 1975. At the same time, costs per student have remained far below those typical of other types of schooling, and the quality of education has not been sacrificed to keep costs down.

OF NOTE:

- The word "analfabeto" ("illiterate") is never used in Radio ECCA broadcasts.
- One ECCA student compared a person who cannot read or write to a sack of potatoes—easy to manipulate and ignorant of his or her rights.
- The majority of students in ECCA's first-level course are of at least middle age.
- Curricula developers try to infuse the lessons with suspense; their aim is to get students to feel that they know more than they realize but "less than they will tomorrow."
- A study conducted in 1973 of Spanish radio audiences showed that Radio ECCA is the most popular station in Las Palmas (where it captures 38 percent of the listening audience on weekends and 61 percent on Sundays) and the third most popular in Santa Cruz de Tenerife (16 and 22 percent, respectively).
- Radio ECCA has won almost every award for excellence in broadcasting that Spain offers: Premio Nacional de Radio (1967), Antena de Oro (1968), Pemio Ondas (1971), Bravo Nacional a los Hombres que Unen (1971), and the Medalla de Plata de los Cincuenta Anos de la Radio Espanola (1974).
- Radio ECCA airs neither news nor commercials. The 108 hours of weekly broadcasting time that is not devoted to classes is allocated to music and public service programming.

- Radio stations in five Latin American countries—Santo Domingo, Ecuador, Bolivia, Venezuela, and Costa Rica—have been molded after Radio ECCA.

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Clearinghouse on Development Communication
January 1978

RADIO SANTA MARIA
DOMINICAN REPUBLIC

TARGET AUDIENCE:	Rural and Urban lower-status adults in the Dominican Republic
OBJECTIVES:	To deliver primary and intermediate education that is both better and cheaper than that provided by the traditional school system
MEDIA:	Radio, print, and interpersonal communication
DONORS/SPONSORS:	Largely self-sufficient with some support from the Government of the Dominican Republic and private contributions
DURATION:	Begun in 1970; continuing
CONTACTS:	Rev. Carlos Rodriguez, Director, Radio Santa Maria, P.O. Box 55, La Vega, Dominican Republic, Dr. Robert A. White, Centre for the Study of Communication and Culture, 221 Goldhurst Terrace, London NW 63 EP, England

DESCRIPTION:

Begun in 1964 under the auspices of the Catholic Church in the Dominican Republic, Radio Santa Maria (RSM) centered its initial educational efforts on a literacy program that helped to certify more than 25,000 adults over a period of six years. A needs assessment defined the focus it has take since 1970—programs leading to certificates at the primary and intermediate levels.

Modeled after ECCA (Emisora Cultural de Canarias), the radiophonic school started in Spain in 1965, Radio Santa Maria depends on three educational aids: workbooklet texts, radio broadcasts, and field teachers. RSM also attempts to integrate the principles of lifelong education—relating school learning to real-life needs—into the traditional school curricula. Thus, classes in mathematics, Spanish, and social studies are illustrated by weekly "central themes" that represent peasants' life situations; themes used in the past include human exploitation and dependence.

While daytime and evening programming include music and nonformal education programs on agriculture, health, and family planning, the hours from 7:00pm to 9:00pm, from Monday through Friday are reserved for

graded lessons. During these hours, when five other commercial and religious radio stations extend the broadcast sphere, RSM's reach is nationwide. Four grade levels are broadcast each evening, with half an hour allotted to each grade. Four seven-minute lessons are spread over an hour's broadcast. The remaining interludes provide for active student involvement in study and the completion of worksheets. Most of the teaching is done by a male-female team; the teammates assume teacher-student roles, asking questions and pausing before answering so that the radio audience has time to come up with answers at home.

On Saturdays students throughout the country congregate, usually in groups of 20, in local centers for two-hour sessions with a field teacher. Here, completed worksheets are collected (to be corrected and handed back the following week), students' questions are handled, and the central theme is discussed. In addition, each student buys the next weeks packet of sic to eight worksheets at a cost of U.S. 25 cents (of which the field teacher receives 15 cents).

According to a 1975 survey, most of the 20,000 students enrolled in Radio Santa Maria's courses each year are your unmarried adults—18 year-olds whose educational potential is otherwise constrained by their rural settings. The field teachers, like their students, are young; but they are required to complete several years of schooling in advance of the level they teach.

The methodology evolved by Radio Santa Maria on the principles of lifelong education breaks with the depending on the conventional remote-memory of learning. The RSM curricula stress education as a tool that helps the individual meet and cope with their environment. This approach, emphasizing the social situation of the student, requires the teaching staff to assume the unconventional posture of equals to their students, investigating and discovering with them rather than imparting knowledge to them. The hope is that the student's self-image and adjustment to his or her world will be enhanced by such a school experience.

RESULTS:

A 1975 study of proportionally stratified samples of adult students compared the standard-test scores of Radio Santa Maria students with those of adult students taught by conventional methods. Generally, the radiophonic students (who study curricula adapted to reflect rural life) score as well or better than their conventionally educated counterparts on standardized tests. The innovative curricula seem to have stimulated RSM

students to greater degrees of community participation. Student test results correlated with the competency of field teachers, suggesting that RSM field teachers are necessary reinforcers of radio and print materials. RSM students, adults able to learn at a more rapid rate, require less class time. Thus, a student may finish eight grades in four years.

Seeming efficient central administration—one director and six curriculum developers organize 520 field teachers and 12,000 students per semester—and special arrangement for buildings, broadcasting, and the purchase of paper, have helped keep operating costs down. The RSM out-of-school system costs $25 per student per calendar year, in contrast to $39 per student in the conventional adult education system. While unit costs increase with the student enrollment in traditional schools, the reverse is true for the radiophonic approach. If 40,000 students enrolled in RSM per year, the cost per student, some estimate, would drop below $20. Student contribution—approximately $7 per course—cover 60 percent of the yearly RSM budget. Government subsidies and personal donations meet nearly all of the remaining expenses.

OF NOTE:

- Since the investment in each course is worth roughly four days' pay at the minimum wage rate, students who understand the scope of their field teachers' duties are quickly to notify the central administration when field teachers fail either to correct worksheets or to send in weekly fees.
- To keep policy decisions in the hands of the actual coordinators of the program, financial dependence on international institutions was limited to the setting up of the physical structure. The ongoing software component is largely self-supporting.
- Weekly enrollment records determine the printing quotas for the next week, so printing overruns are avoided and costs are kept down.
- Once concentrated in the north-central Cibao region of the Dominican Republic, Radio Santa Maria is now accessible to all but a small southwestern corner of the country.

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Clearinghouse on Development Communication
October 1977

THE SHUAR RADIO SCHOOLS
ECUADOR

TARGET AUDIENCE:	School-aged children of the Shuar Indians of eastern Ecuador (approximately 3,100 in 1978)
OBJECTIVES:	To provide elementary education where conventional methods have failed
MEDIA:	Radio, print, and interpersonal communication
DONORS/SPONSORS:	The Shuar Indian Federation and International donors
DURATION:	Begun in 1972; ongoing
CONTACTS:	Rafael Mashinkiash', Education Director, Shuar Federation, Domingo Comin 17-38, Sucua, Ecuador; Ampam Karakras, Shuar Federation, Apartado 4122, Sucua, Ecuador

DESCRIPTION:

Since 1972, the Shuar Radio School have served Ecuador's 26,000 Shuar Indians, who live in a jungle area now being colonized by settlers from the Spanish-speaking majority culture. Like most other indigenous groups in the Americas, the Shuar are having problems adapting to the onslaught of Western civilization. Shuar Federation documents speak of the traumatic impact of missionaries and colonists. They refer to the degeneration of moral standards, to the disintegration of the family, and to anomie. Also mentioned is the trend toward the development of an anonymous Shuar sub-proletariat living in peripheral belts around colonized centers.

The approaches of the national formal education system have had to be modified to meet the educational needs of the Shua youth. Because populations tend to be sparsely settled (the average Shuar Federation Center having only 15 to 25 families in its vicinity), the costs of providing certified teachers for all the centers seems unjustifiable. Indeed, in 1971, before the advent of the radio schools, only 36 of the 103 Shuar Federation Centers had schools.

Even in areas served by formal schools, drop-out rates have been high: teachers who did not know the Shuar language or culture could not meet the Shuar's

educational needs. For example, of 30 certified teachers who were not ethnic Shuar, only two declared an interest in continuing to work with the Shuar. Among teachers in the 28 schools where the teachers had been working for at least two years, the same attitude prevailed. Of 30 recent graduates from Macas Teacher Training College (in the Shuar region), none felt that learning the Shuar language is necessary to work effectively among the Shuar.

Shuar Federation documents also report that traditional schooling materials and methods have failed to provide learning opportunities relevant to the Shuars' needs. The national textbooks do not use the Shuar language. According to the Federation, figures and examples cited in the texts used in Ecuador are completely foreign to the mentality and experience of the young Shuar. Scheduling in the schools is not even attuned to the customary meal times of the Shuar.

To build a system based upon the few certified ethnic Shuar teachers, the Federation decided to use radio. With these teachers (called tele-teachers) occupying key positions, other less highly trained Shuars (called tele-auxiliaries) could run individual radio schools. The criteria for creation of a radio school have been the existence of (a) suitable facilities, (b) at least 15 potential participants, (c) active development projects in the community, and (d) community interest.

In 1973, the first year of operation, 503 students were enrolled in 30 radio schools. By 1978, the number of students enrolled had reached 3,086 and the number of radio schools had reached 120. The Federation reports that the number of centers still not convinced of the importance of the radio schools has fallen to three or four at most. (The few centers that resist still suspect a religious or political motivation behind the educational effort.)

The XI General Assembly of the Shuar Federation unanimously approved extension of the curriculum through the second cycle. Most of the bi-lingual textbooks needed to teach reading and math in the first through fourth grades have been developed, and the XXII General Assembly ratified expansion to cover the entire primary curriculum. As of May of 1978, texts were being developed for 4th-grade math and 5th-grade reading.

Each tele-lesson begins with a 25-minute segment led by the tele-teacher in the radio studio. After a brief introduction, the material from the previous lesson is reviewed. The new material is then presented in a series of steps including those aimed at motivating the students and evaluating their progress. Next, the tele-

auxiliary in the classroom leads exercises in which the new knowledge is repeated and reviewed.

The methods employed include direct group listening, use of printed materials, and continuous supervision from the central staff. Six professionals, who are also responsible for upgrading the effectiveness of the tele-auxiliaries, for motivation community action, and for assisting in formal evaluation of the instruction, make up the supervisory staff.

By stressing the Shuar language and culture, the classroom methods encourage the liberation of the positive energies of the students. Commitments to maintaining and developing the cultural identity of the Shuar and to overcoming complexes that result from being colonized are strong. Besides covering the official curriculum, the aim is to integrate—not to assimilate—the Shuar into the mainstream.

RESULTS:

For the first time education offered to Shuar youth has been systematized, consciously related to Shuar culture, and made the responsibility of Shuar teachers. The Federation estimates that the drop-out rate is now minimal, compared with a rate of 30 percent in the conventional schools that the radio schools replaced.

The numbers of students enrolled have grown steadily over the years that the radio schools have operated. The pass rates have been high, although they have declined somewhat with the expansion of the system.

Year	Students completing the academic year	Students promoted	Pass rate
1972-73	486	473	97.45%
1973-74	1,278	1,231	96.4%
1974-75	1,955	1,732	89.0%
1975-76	2,654	2,349	88.0%
1976-77	2,704	2,285	84.5%

OF NOTE:

- Annual courses for the tele-auxiliaries are planned in order to upgrade their effectiveness as teachers.
- The bi-lingual education law of neighboring Peru places Quechua on an equal footing with Spanish as a national language, a fact that Shuar Federation is weighing.
- One of the Shuar publications contains excerpts from Bury My Heart At Wounded Knee and comparisons of the Shuar's current situation with the

historical predicament of the North American Indians.

- In 1978-79, a small number of centers will undertake an experimental program, entrance to which will not require a primary certificate. The focus will be on practical learning—on upgrading and marketing local crafts, for instance.
- The methods employed in the radio schools promote spoken and written fluency in both the Shuar's mother language and in Spanish: The Shuar language is not used as a mere bridge toward expression in the national language.
- While administrators of The Shuar Radio Schools recognize the importance of teaching Shuar youth about the outside world, a lock of appropriate teaching materials inhibits efforts to do so.
- The project's supervisory and evaluation staff now consist of one chief administrator and eight auxiliary supervisors.

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Clearinghouse on Development Communication
January 1979

INSTRUCTIONAL TV AND EDUCATIONAL REFORM
EL SALVADOR

TARGET AUDIENCE:	7th,8th, and 9th graders in El Salvador
OBJECTIVES:	To extend public education to all 13 to 15-year-olds so as to increase El Salvador's middle-level labor force
MEDIA:	Television and printed supplementary materials
DONORS/SPONSORS:	The Government of El Salvador (assisted by the U.S. Agency for International Development, UNESCO, other international agencies, and the Government of Mexico and Japan)
DURATION:	Implemented over several years in the late 1960's; currently in lower primary grades; expected to cover grades one through nine by 1980
CONTACTS:	ETV-El Salvador, Ministry of Education, San Salvador, El Salvador; Dr. Robert C. Hornik, Associate Professro, University of Pennsylvania, Annenberg School of Communication, 3620 Walnut Street, Philadelphia, Pennsylvania 19104; Dr. Henry T. Ingle, 7938 Bayberry Dr. Alexandria, VA 22306, U.S.A.

DESCRIPTION:

El Salvador's Instructional TV project began in the late 1960's as one part of a pervasive education reform. Initiated by President Fidel Sanchez Hernandez, the overall reform has as its goals the fulfillment of the right of all Salvadorans to nine years of free schooling and the expansion of the middle-level labor pool, as well as the general improvement of the school system.

When instructional television was introduced, several other changes that influenced TV's impact were made. The Ministry of Education was reorganized under stronger central authority and was expanded to include a planning office. At the same time, the school-supervision system and curricula were revised. Third Cycle (7th, 8th, and 9th grade) teachers received a years paid leave in which to participate in intensive retraining

activities, tuition for grades seven through nine was eliminated, double sessions were established, and a much more liberal promotion, grading, and student-evaluation system was instituted. All these changes either encouraged or accommodated a sizable growth in class enrollment.

Television carried the core of the revised curricula and thus ostensibly shouldered part of the increased teaching burden from February of 1969, when it was first used in 32 pilot 7th-grade classrooms. From then on, two to four 20-minute programs were broadcast weekly in each of five subject areas: Spanish, social science, natural science, math, and English. Each TV lesson was preceded by a ten-minute motivating session conducted by the classroom teacher and followed by a teacher-led reinforcement session that lasted about 20 minutes. Teacher guides and student workbooks were used to supplement the televised lessons.

RESULTS:

Reports of the success of El Salvador's use of instructional television vary, though the project is still going strong. Quantitative analysis shows that students in ITV-classrooms realized overall gains in basic skills of 15 to 25 percent above those of peers who studied in traditional classrooms or in reformed classrooms without ITV. Qualitative indicators are also positive: both students (especially disadvantaged and slow-learning children) and teachers voiced approval and enthusiasm for television classrooms. While excitement did wane somewhat after the novelty of TV had worn off (roughly four year after its introduction), the liveliest productions have remained popular.

Some teachers and project evaluators involved with ITV in El Salvador believe that the programs full potential has not been realized. The most commonly voice complaint of teachers who took part in ITV has been that the equality of the television lessons is uneven. One evaluator claimed that the El Salvador project verified the notion that television is best used to present materials that the teacher cannot present as well (in competition with television, some teachers treat it a s a "babysitter," while other choose not to use it at all). Finally, some evaluators contend that this educational reform is not adequately integrated into El Salvador's general development plan, that students involved in the program cannot find jobs or cannot find slots in the next level of education—the "Bachillerato Diversificado."

OF NOTE:

- Student's receptivity to instructional television was greater with respect to English and social sciences than to math and natural science. Yet math achievement was boosted more than achievement in the natural and social sciences.
- Opposed to the idea of depending upon foreign advisers to run their new ITV program, El Salvador's leaders insisted that local people bear major responsibility for ITV from the start.
- In July of 1971, Salvadoran teachers struck. While the increase in workloads precipitated in part by the use of television in the classroom was not a major point of contention, the issue was raised by some of the striking teachers.

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Clearinghouse on Development Communication
June 1977

ACCION CULTURAL POPULAR HONDURENA
HONDURAS

TARGET AUDIENCE:	7th, 8th, and 9th graders in El Salvador
OBJECTIVES:	To extend public education to all 13 to 15-year-olds so as to increase El Salvador's middle-level labor force
MEDIA:	Television and printed supplementary materials
DONORS/SPONSORS:	The Government of El Salvador (assisted by the U.S. Agency for International Development, UNESCO, other international agencies, and the Government of Mexico and Japan)
DURATION:	Implemented over several years in the late 1960's; currently in lower primary grades; expected to cover grades one through nine by 1980
CONTACTS:	ETV-El Salvador, Ministry of Education, San Salvador, El Salvador; Dr. Robert C. Hornik, Associate Professro, University of Pennsylvania, Annenberg School of Communication, 3620 Walnut Street, Philadelphia, Pennsylvania 19104; Dr. Henry T. Ingle, 7938 Bayberry Dr. Alexandria, VA 22306, U.S.A.

DESCRIPTION:

Accion Cultural Popular Hondurena (ACPH) both is the education arm of the Honduran *campesino*-based self-development movement called the Popular Promotion Movement (PPM) and a young relative of Colombia's ACPO radio schools. ACPH got its start in 1960 when Honduran priest, P. Jose Molina, returned from a brief internship at ACPO and helped set up an experimental radio school in the environs of Tegucigalpa. Although now supervised by a lay board of directors, the school has relied heavily upon grassroots parish networks and upon the motivating power of the pulpit in its efforts to spread literacy and information.

ACPH was essentially an ACPO transplant in its early years, and ACPH's system and textbooks were adapted from Colombian models. Like its prototype, ACPH called upon rural pastors to work up support for adult literacy

classes. These local clerics selected one volunteer auxiliary teacher (or "monitor") form a *campesino* family in each community. In turn, these monitors were trained to recruit students, organize classes, help the regular classroom teachers supervise student work, and file monthly reports on the attendance and progress of the classes. Monitors also took charge of the texts, radio, and other classroom materials.

By 1964, when student enrollment had reached almost 15,000 and the schools had been operating long enough to make reflective evaluation of their success meaningful, the emphasis of ACPH programs was switched from promoting literacy and short-term community-development campaigns for forming local organizations of the poorest *campesinos* in order to help the "disinherited" to create political and economic leverage. Reading and writing remained part of the curricula, but to these academic courses were added programs aimed at developing attitudes an skills that would enable the *campesinos* to organize themselves to act responsibly to further their own social and economic welfare. The watchwords of the consciousness-raising activities became 'participation' and 'domestic leadership.'

In the late 1960's and early 1970's, ACPH took another step in the direction of equating adult education with politicization. The radio schools adopted Paulo Freire's psychosocial approach to personal and community self-realization. To consciousness-raising, the communication of fundamental skill, and the identification of indigenous leader was added a fourth mandate—the formation of regional and national *campesinos* organizations able to deal with government agencies. Part of the impetus for the organizing activities has come from members of the Christian Social Movement—university student and young professionals with training in agronomy, education, or economics—who aligned themselves with the PPM by 1970.

A recent change in ACPH's focus of operations, the addition of a four-year primary-school program leading to a diploma recognized by the Honduran Ministry of Education, took place in 1972. In 1977, ACPH introduced an agricultural education program using paraprofessional agronomists and mass communication methods to make agricultural technology available to small highland farmers in remote communities.

RESULTS:

ACPH has been evaluated by both it own staff and by professional evaluators called in form outside. The

finding of a study conducted in the mid-1960's by outside observers was that enrollment was encouragingly high but that several factors (among them the facts that nothing prevents literate student from taking the courses and exams, that no reliable tabs are kept on the number of students who repeat each year, and that "cooperation" between the test-takers and test-givers was rumored to have taken place) made the qualitative aspects of the literacy and numeracy segments hard to assess. Sparse population distribution, lack of leisure time in which to study, administrative pitfalls, and adverse weather conditions were also identified in that study as unquantifiable determinants of program's impact.

A more rigorous evaluation, conducted in 1971 by an American and based upon an analysis of a stratified sample of 794 radio-school students, confirmed the continued existence of the socioeconomic impediments identified in the earlier study and raised the question of the value to literacy to *campesinos* with little to read and little time in which to read it. This study found that roughly 108,000 students enrolled in ACPH between 1961 and 1970, that about 18,000 of that number were examined and passed at least one, and that only two-thirds of these who took an exam actually achieved minimum functional literacy (defined as the ability to recognize a series of works, match words to pictures, writ one's name, and to answer in writing one or two questions about a passage.)

The picture of the consciousness-raising organizing activities of ACPH and PPM that emerges from the secondary study is brighter than that of the literacy program. ACPH has established a development communication system that has made possible the construction of hundreds of rural schools and many neighborhood water systems. It has served as the basis for the organization of *campesino* women's groups, consumer cooperative, 300 agricultural production groups, and many local *campesino* pressure groups involved in land recuperation.

OF NOTE:

- The literacy programs are broadcast six days a week for a single seven-or-eight-month term each year. The advanced classes are broadcast in mid-afternoon and the beginners' lessons in late afternoon. Groups meet in homes, schoolrooms, or parish halls.
- In 1970, an estimate 30 percent of those *campesinos* taking the literacy course had nothing in their homes to read. Unlike ACPO, ACPH has not

published inexpensive booklets and newspapers for the *campesinos* to enjoy at home.

- ACPH is one of the combination of *campesino* paraprofessionals, the radio, volunteer agricultural promoters, and a system of neighborhood demonstration plots to communicate agriculture technology at low cost to small farmers in remote mountain communities.
- The basic education and agricultural education programs of ACPH are part of an integrated rural development system of private agencies that includes consumer and marketing cooperatives, a national federation of *campesino* women, an agricultural lending institution, and *campesino* pressure groups.
- ACPH is developing a radio-mediated program of primary school education that is closely integrated with agricultural education and organized in terms of flexible, brief units of one month to six weeks each.

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Clearinghouse on Development Communication
April 1978

SITE TEACHER TRAINING
INDIA

TARGET AUDIENCE:	7th, 8th, and 9th graders in El Salvador
OBJECTIVES:	To extend public education to all 13 to 15-year-olds so as to increase El Salvador's middle-level labor force
MEDIA:	Television and printed supplementary materials
DONORS/SPONSORS:	The Government of El Salvador (assisted by the U.S. Agency for International Development, UNESCO, other international agencies, and the Government of Mexico and Japan)
DURATION:	Implemented over several years in the late 1960's; currently in lower primary grades; expected to cover grades one through nine by 1980
CONTACTS:	ETV-El Salvador, Ministry of Education, San Salvador, El Salvador; Dr. Robert C. Hornik, Associate Professro, University of Pennsylvania, Annenberg School of Communication, 3620 Walnut Street, Philadelphia, Pennsylvania 19104; Dr. Henry T. Ingle, 7938 Bayberry Dr. Alexandria, VA 22306, U.S.A.

DESCRIPTION:

In August of 1975, India began a one-year experiment in mass education using satellite to broadcast television in a variety of development programs. ATS-6 was lent to India by NASA, which positioned the satellite over the Indian Ocean, where its "footprint" covered six of India's 22 states. 2,400 hard-to-reach rural villages participated in the Satellite Instructional Television Experiment (SITE). The objectives of the program were to test the country's ability to produce and utilize instructional television designed to cover agriculture, health, family planning, primary education, teacher training, and community development.

The Center for Educational Technology (CET) prepared the materials for the SITE project: 13 films (each 22.5 minutes long), 12 radio programs (each 20 minutes long), instructions for teachers on how to perform 24 hours of experimental work in class, and printed materials for self study. CET also conducted training

sessions for 3,000 tutors selected from among science graduates teaching high schools or enrolled in teacher-training institutions. CET organized the practical work so that formal laboratories and expensive materials would not be needed to carry out the experimentation. It also devised a system to train roughly 24,000 teachers simultaneously. To this end, CET used 60 resource persons familiar with the philosophy and materials of the program to train the 3,000 tutors (to make sure that at least 2,400 would be available) who were, in turn, charged with training the teachers.

The TV program's, produced in four languages and broadcast via satellites to villages sets with enlarged antennas and the radio broadcasts, formed the base of the training day. Accompanying print materials were produced, buy their dissemination was sometimes made difficult by rain and poor roads. To reinforce content and methodology, teacher-monitors led discussions following the broadcasts. Subsequently, two and a half hours in each session were given over to experimentation—emphasized because rural teachers, unfamiliar with experimentation, are reluctant to risk losing face by publicly carrying out experiments that could fail. Those who conducted the program made a concerted effort to show that the scientific method—described by the program's director observing the facts, framing a problem, systematizing knowledge, finding the possible causes and solutions to the problems, testing the possibilities, and coming to a solution—applies to a variety of settings.

A host of messages was stressed in the training program. Chief among them were the importance of experiments in science education and in imbibing students with the spirit of scientific inquiry, the fact that experiments can be performed without a laboratory, the appropriateness of the scientific method as a means of helping young children solve problems, the need to make use of the child's environment in scientific problem-solving, and the value of seeing the child's whole environment as a laboratory of sorts. Also emphasized were the importance of learning by doing, class participation, group work, and field trips. All these messages were carried by various media, according to which did the job best.

RESULTS:

CET conducted these studies of its teacher-training project. Two were associated with the two training programs in October 1975 and July 1976; one was made in a controlled situation. Each of the three studies pointed to positive gains in knowledge of content and

pedagogy. These gains varied from 10 percent in the first attempt to 40 percent in the controlled experiment. Overall, the evaluation revealed that primary-school teachers received the training program positively.

Apart from gains in knowledge and understanding of method, changes in classroom behavior were also observed. Apparently, teachers trained in this project were trying to conduct more experiments in their classes and were making an effort to involve students in the classroom. However, the students' initiative in asking questions has remained low.

Once knowledge of this project's success spread, educators in many areas where this training could not initially be offered began asking for materials and for other kinds of help in organizing similar programs in other states.

OF NOTE:

- A feedback component has been implemented to use teachers' observations made during the training sessions carried on throughout the year. This feedback takes the form of an active correspondence between graduates of the program and CET. Many rural teachers send description of their problems to CET, asking its counsel. The Center builds on this feedback to construct future program approaches.
- All of the electronic hardware used in the project, except the satellite itself, was produced in India, as was all of the broadcast programming.
- Although the ATS-6 moved away form India in July 1976, the teacher-training package is still being used. TV has been replace by film, and most radio broadcasts by audio tapes.
- Official reports on the findings of the various components of SITE are now being, released by the Indian agencies that participated. Evaluative papers on the teacher-training program are available through CET.
- The AT-6, lent to India by NASA for the SITE experiment, generate higher powered signals than did earlier satellites. It thus requires relatively inexpensive earth stations equipped with east-to-construct 10-foot wire mesh antennas. Consequently, the cost of earth stations to the Indian government was relatively low.
- The AT-6 is the sixth and last in a series of American Satellites designed to test, among other things, educational broadcasting to dispersed rural populations. In 1974, this satellite was used in a one-year experiment to provide health care to

Alaska. It provided television communication between two remote clinics, a field hospital, and the referral hospital.

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Clearinghouse on Development Communication
January 1978

CORRESPONDENCE COURSE UNIT
KENYA

TARGET AUDIENCE:	Kenyan primary-school teachers, government employees, staff members of private organizations, and other adults
OBJECTIVES:	To provide in-service courses to under-qualified and unqualified primary-school teachers and to other adults in need of further training
MEDIA:	Print, radio, interpersonal communication
DONORS/SPONSORS:	Government of Kenya, University of Nairobi, the U.S. Agency for International Development (through April 1971
DURATION:	Begun in 1967; ongoing
CONTACTS:	Ben K. Gitua, Correspondence course Unit, Institute of Adult Studies, University of Nairobi, P.O. Box 30688, Nairobi, Kenya

DESCRIPTION:

The Correspondence Course Unit was proposed in 1964 and set up in 1967, by which time it was obvious that Kenya's post-independence teacher-education program could not meet the nation's rising demand for qualified teachers. After a needs assessment was carried out by the Kenya Education Commission, highest priority in the CCU was according to the courses designed to upgrade the skills of primary-school teachers, more than one-fourth of whom (10,500 or 38,000) lacked at least some necessary professional skills and credentials, and to qualify them for promotion. To these courses, called Kenya Junior Secondary Examination Preparatory Courses, was added in 1969 another series for teachers with no previous training whatsoever: the Unqualified Teachers (UQT) course comprises a preliminary phase of training in pedagogical methods or geography. Those in the KJSE sections study privately on a part-time basis until they pass exams in five subjects. Those in the UQT courses attend three short live-in sessions during school holidays during the first year and study part-time on their own during the second; the untrained teachers need pass exams in only three subjects.

Each CCU course has four components. One consists of various printed materials—study guides, texts, maps, etc.—supplemented by simple instruments and science-experiment kits. Radio, which reiterates and supplements the content of the graphics, is the second part, while correspondence with high school and university instructors who grade the written work is the third. The last component is face-to-face teaching most of which occurs at the residential sessions held during school breaks at the University of Nairobi's Institute of Adult Studies.

The relationship between the use of radio and that of print is determined by the CCU student. In general, the five house of educational radio programs broadcast weekly are aimed at the slower students, who need a second chance to grasp the materials. The radio teacher obliges the slower learners by summarizing and highlighting the material, occasionally anticipating the students' questions and offering additional examples and explanations. Students satisfied with their command of the material (as measured by self-testing exercises included in the study guides) are free to skip the radio broadcasts. Nevertheless, radio does offer indispensable services to slow and quick learners alike: it provides correct models of pronunciation for language students, fosters rapport between teachers and students in learning set-up that is otherwise relatively devoid of the human element, and provides dental (unenrolled) listening audience (estimated at between 300,00 and 800,000 adults) whose size has prompted the CCU programmers to address its needs.

In-service training programs for primary-school teachers will continue to grow, since as of 1974, primary education is free for all Kenyans. While the number of unqualified primary-school teachers had been reduced to 12,000 by late 1973, and estimated 25,000 such teachers had to be employed (along with all available qualified teachers) by 1976. Although Kenya's 1974-78 Development Plan recommends adoption of a crash course (known as the "1+2 teacher-training program") to meet these new needs, it also specifies that "correspondence courses and radio program must remain the main vehicles of out-of-school education."

RESULTS:

A fifth-year evaluation of the CCU project, carried out by a foreigner and based on the data gleaned from a questionnaire, showed that approximately 60 percent of the students' study-related problems were environmental. These obstacles to learning include lack of time or of a decent place in which to study, personal

troubles, and family problems. In contrast, ten percent were constrained by pedagogic difficulties. The same evaluator pegged the drop-out rate between 15 and 25 percent, as compared with 70 percent for students of foreign-based correspondence schools operating in Kenya.

Since 1968, the performance of all students sitting for the KJSE examinations have been compared. The comparison has shown that CCU participants consistently perform better than other exam-takers. In 1970, for example, when the average pass rate was 15 percent, 51 percent of the CCU student who took the exam passed it.

An evaluation of the UQT program was conducted in the early 1970's to find out if the program's graduates competed academically and professionally with graduates of teachers' colleges. By polling UQT graduates, researchers found that 99 percent felt their performance in the classroom had improved as a result of the CCU training. This finding was corroborated by a poll of the UQT graduates' teaching supervisors, who reported that 95 percent of the teachers had made significant professional gains. In turn, the students of the newly trained teachers performed better than their peers on national exams.

Despite these positive findings, however, the program cannot be deemed an unqualified success until more thorough study is made of the teaching abilities of its graduates as measured in the classroom. Moreover, whether correspondence courses provide the best means of teaching teachers remains open to question.

OF NOTE:

- The CCU has its own facilities for printing, duplicating, binding, and mailing its course materials. Its production facilities include a recording studio and a small science laboratory.
- A survey conducted in 1968 showed that 90 percent of all CCU enrollees were teachers. The remaining tenth was made up of clerks, housewives, farmers, member of the police and the armed forces, and other workers.
- CCU's enrollment is open year-round, and student are permitted to work more or less at their own paces.
- The typical CCU student is between 21 and 40 years old, is married, is responsible for more than four children or other dependents, and is not likely to own a radio or many books, buy a newspaper regularly, or have electricity in the home.

- In direct response to the success of CCU, several Kenyan organizations have decided to sponsor jointly a multi-media experiment using radio, film, and newspapers in conjunction with organized discussion groups in rural areas. If successful, the pilot project will become a long-term nationwide program.
- CCU offers some courses to blind students. These students can receive the broadcasts on cassettes and the printed materials in Braille.
- None of the CCU graduates is known to have switched careers after finishing the course.
- The use of radio in this project represents, on the one hand, the continuation of the oral tradition of Africa and, on the other, an improvement over the often stale and alien fare offered by American and British correspondence schools in East Africa.

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Clearinghouse on Development Communication
January 1978

KEDI EDUCATIONAL RADIO AND TELEVISION BROADCASTING
KOREA

TARGET AUDIENCE:	Korean schoolchildren, youth and adults seeking post-middle-school education; teacher; and a general adult audience
OBJECTIVES:	To create a system of instructional design, using broadcasting media to enhance the effectiveness of classroom instruction and to increase educational access
MEDIA:	Print, television (closed-circuit), radio, interpersonal communication
DONORS/SPONSORS:	The Government of Korea; Korean Educational Development Institute (KEDI); Korean Broadcasting Service (KBS); U.S. Agency for International Development; Export-Import Bank of U.S. Credits
DURATION:	Established in 1972; ongoing
CONTACTS:	Dr. Yung Dug Lee, President, KEDI, 20-1 Umyeon-Dong, Kangnam-Ku, Korea (Seoul C.P.O. Box 7019); Dr. Robert Morgan, Learning Systems Institute, Florida State University, Tallahassee, FL 32306, U.S.A.

DESCRIPTION:

The Korean Education Development Institute (KEDI) was established in 1972 amid growing concern over the need for comprehensive reform of an educational system that had been characterized by a critical regional imbalance of access to education, inadequate teacher training, and low student achievement levels. KEDI was created as an independent, government-funded educational research and development institute to serve the Ministry of Education in analyzing educational needs and designing and testing new teaching and learning materials and programs. KEDI's core assignment was the Elementary and Middle-School Development Project (E-M Project). The E-M Project plan included development of a curriculum that emphasized educational goals more relevant to national and individual needs, a different method of grouping students and administratively organizing schools, a different rang eof mix of instructional resources and delivery methods, and different patterns of instructional staffing. A major

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component of the five-year E-M Project (1972-77) was the development of a radio and television broadcasting system exclusively for the educational purposes under the Ministry of Education. Materials developed by KEDI for the IE-M Project included instructional materials (student workbooks, teacher guides, radio and television programs), evaluation instruments, teacher training materials, and implementation manuals.

In addition to the E-M Project, KEDI launched the Korean Air and Correspondence High School (ACHS) program in 1974 to provide secondary education via mass media to youths and adults at home and in ACHS classrooms. (See Korean ACHS Project Profile, April 1979.) Another special KEDI program was set up in 1973 to bring educational access to the residents of the 700 islands of the Sinahn District, a region with severe transportation and communication problems, limited social and cultural contacts, and poor educational opportunities. Daily FM radio broadcasts to 62 primary schools, 60 branch school, and 13 middle schools consist of administrative, supervisory/training, instructional classroom, and non-formal community development educational programs.

KEDI's In-Service Teacher Education Project was established to provide a variety of educational programs to upgrade teachers' skills and competencies, utilizing instructional radio for 15 minutes each day for 22 weeks on such topics as current Korean educational problems, new educational system models, instructional objective and procedures to develop materials, and the future of the country.

KEDI's broadcast system comprises a transmission site, complete in 1976, and a production and broadcast studio new Seoul, completed in 1975. KEDI's broadcast studio includes two large, highly developed, three-camera color television studios and two well-developed radio studios, one for voice recording and one for dramatic production. A broadcast council was established to review and evaluate instructional television and radio (ITV and IR) prior to airing, determine criteria for production and program quality, conduct research on ITV and IR effects on learning, and solicit feedback form users in the field.

During the period of construction of the transmission system, serious and unexpected technical problems acrpss that made television broadcasting impossible. KEDI's television transmission system was finally declared unworkable and dismantled, and broadcasting to date has been limited to radio. This critical delay forced KEDI to rely upon a small, portable closed-circuit TV set-up for its ITV lessons; diverted manpower and time from other activities; and necessitated a major modification in the original testing, research, and

implementation plan for the E-M Project. KEDI's reliance on radio and television for classroom instruction has been reduced significantly.

RESULTS:

Due to the delay caused by the failure of the transmissions system, KEDI's staff and broadcast council have lost more than three years of broadcast experience as well as public credibility due to expectations for color television broadcasting. Despite this, KEDI has continued to collect and analyze data on the role of radio and television and has produced some 1,591 televisions programs in anticipation of the time when a transmission facility will be available.

Four "small-scale tryouts" were conducted as part to the E-M Project for May 1973 through July 1976, involving pupils from the second, third, and fifth grades in elementary schools receiving ITV and IR lessons in a variety of subjects. Although there are some problems with definitive interpretations of the results of these tryouts, they do show generally higher student achievement levels where KEDI instructional materials were used. From September 1975 through June 1978, four larger "comprehensive demonstrations" were conducted in grades three through six using ITV lessons via a closed-circuit TV system in two of the demonstrations and IR in three of them. Due to design methodology and lack of current information on results, the effects of ITV and IR alone are not known; however, available results on all of the major variables show significantly higher achievement levels for demonstration students. The effectiveness of KEDI print and non-print instructional materials was later tested in a "small-scale tryout" in a middle-school. Higher achievement scores were obtained by students in KEDI schools than in schools without KEDI materials, and, within the KEDI schools, higher achievement shores were obtained by students taught by ITV or IR.

While academic, achievements of ACHS students generally fall below those of regular high school students, this has been attributed to differences in students' academic preparation. Problems in the project programming that does not adequately hold students' attention and inability of students to keep the attendance schedule.

OF NOTE:

- Of total costs related to the E-M Project, 82.2 percent have resulted from efforts to create,

program, and transmit radio and television for instructional purposes.

- Plans are now underway to construct a ground-base TV transmission system and FM radio networks that will reach into every major city in Korea, covering 80 percent of the total population.
- Construction of the new FM network of 43 stations is estimate to cost approximately $5.3 million, and the cost of the planned two new radio studios is set at approximately $0.5 million.

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Clearinghouse on Development Communication
September 1979

KOREAN AIR AND CORRESPONDENCE HIGH SCHOOL
KOREA

TARGET AUDIENCE:	Youths and adults seeking post-middle-school education
OBJECTIVES:	To provide secondary education via the mass media to those unable to attend high school after finishing middle school
MEDIA:	Radio, print, and interpersonal communication
DONORS/SPONSORS:	The Government of Korea, Korean Education Development Institute (KEDI); Korean Broadcasting Services (KBS)
DURATION:	Begun in 1974; ongoing
CONTACTS:	Shigenari Futagami, Media Specialist, Education Division, International Bank for Reconstruction and Development, 1212 H Street, N.W., Washington, D.C. 20433, U.S.A.; Dr. Hyung Rip Kim, Director, Educational Broadcasting Department, Korean Educational Development Institute (KEDI), 20-1 Umyeon-DongSan Gangnam-Gu, Korea C.P.O. Box 7019, Seoul, 134-03, Korea

DESCRIPTION:

The Korean Air and Correspondence High School (ACHS) program was launched to provide high school education for youths and adults unable to continue their education because of economic and other reasons after finishing middle-school. An offshoot of a similar program that operated at the junior college level, the ACHS program came into existence in March of 1974. The ACHS program, sponsored by the Korean government and the Korean Education Institute (KEDI), used the same principles and the same media as the junior college program.

The Ministry of Education takes responsibility for making policy, designing the curriculum, approving the establishment of participating schools, approving textbooks, and providing general supervision. The regional boards of education select the participating local

schools, assign students to these schools, and offer local supervision. KEDI develops the textbooks used, produces and broadcasts the radio programs, selects course developers, designs books and evaluation materials, and compiles relevant statistics. The administrative functions of the Air Correspondence High Schools include classroom teaching, student counseling and guidance, maintenance of student records, correction and evaluation, and management.

ACH's curriculum and philosophy are basically the same as those of a regular high school (RHS), though some adjustments have been made. To obtain the ACHS Diploma, the student must complete 204 units of study in the three grades of the course. Each unit represents 50 minutes of instruction each week per semester. The units cover 14 subjects, including Korean, social science, mathematics, natural science, physical education, military training, English, German, music, and a vocational option. In addition to completing 204 units of study, the student is expected to put in some 1,224 hours of study a year, divided between self-study (862), instruction at a center (182), and instruction by radio (180). The mode of instruction in the ACHS is basically self-study, but considerable supplementary support is offered to the student. Total instruction consists of self-study, supplementary textbooks, programmed assignments, radio broadcasts tailored to the course, attendance at educational centers every other Sunday, correspondence by mail, and monitoring and testing.

The students receive radio lessons of 30 minutes (two 15-minute programs) a day and classroom lessons every other Sunday at the respective schools. Teachers and faculties of regular high schools are recruited and utilized for this program. Annually, 625 radio programs for each of the three grades of the ACHS are produced by the KEDI Broadcasting Department and delivered through KBS and other commercial broadcasting networks.

RESULTS:

Although much of the success of the ACHS project reflects the high motivation of the student body and the cooperation of government officials and the KEDI, it should be noted that a set of inherent comparative advantages facilitated project implementation and progress. First, the goals and objectives of such a project can be clearly defined with respect to target groups. Second, since the project depends heavily on the intensive use of exiting human and physical resources, its costs can be kept manageable. Heavy investments in physical facilities or a great number of

new teachers are not required. Existing classes of any school can be used, existing radio or television facilities can be rented, and trained high school teachers can be contracted. Third, the project's mode of financing is ideal: to a large extent, the project can be financed by user fees. In addition, other advantages derive form the flexible multi-media methods of instruction. Each educational medium has its strength and weakness. Different media can be combined in such a way that one can complement the other, thus making instruction more effective.

A study of the work of KEDI (conducted by the research team of air and correspondence education in 1974) indicated that of the correspondence course students, 60 percent seldom study, 28 percent study a little, 9 percent occasionally, and only 2 percent regularly. To date, these statistics have not changed significantly.

OF NOTE:

- A major problem in educational broadcasting is the difficulty of adjusting broadcasting time to provide convenient access to students. The commercial networks usually allocate educational programs time slots that are inconvenient for student audiences.
- The schools at which students are required to take classes every other Sunday are often situated far from the students' homes. This results in a low attendance rate. It may thus be necessary to establish more high schools in small cities in the future.
- Basically, the only standard qualification required for admittance into the air and correspondence schools is that middle school be completed. As a result, academic achievements of the air and correspondence high school students generally fall below those of regular high school students. A majority of the students have finished middle school several years before they come to correspondence school and, therefore, their academic preparation is often inadequate. Thus, supplementary instruction is necessary for these students to ensure effective learning.

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Clearinghouse on Development Communication
April 1979

LESOTHO DISTANCE TEACHING CENTRE
LESOTHO

TARGET AUDIENCE:	The Basotho (people of Lesotho), especially those living in the countryside
OBJECTIVES:	To use distance-teaching methods to provide the people of Lesotho with practical education, and to assist other organizations engaged in education or training
MEDIA:	Print, radio, reinforced by interpersonal communication
DONORS/SPONSORS:	Government of Lesotho; Training for Self Reliance (World Bank); the International Extension College; World University Service; World Education; Christian Aid; the Irish Government; the Danish Government; UNICES; Netherlands Organization for International Cooperation; International University Exchange Fund; Agency for Personal Service Overseas; and others
DURATION:	Established in 1974; ongoing
CONTACTS:	Paud Murphy, General Secretary, DEDCO, 11 Ely Place, Dublin 2, Ireland; Sister Mary Molelle, Deputy Director, LDTC; James Hoxeng, S+T/ED, AID, Washington, D.C. 20523, U.S.A.

DESCRIPTION:

The Lesotho Distance Teaching Centre (LDTC) was designed and set up by the International Extension College at the request of Lesotho's Ministry of Education in 1974. LDTC functions chiefly as a correspondence school, producing radio and print courses for student unable or unwilling to attend conventional classes, but it is a service agency too. The Centre's primary commitments are to using indigenous talent and resources, maintaining institutional flexibility, tackling local problems, and integrating itself into as many aspects of community life as possible.

The Centre comprises several departments: Administrative and Finance, Research/Writing/Editing, Layout, Production, and Radio. Typically, all the departments play a part in every project, so almost all

staff members are acquainted with the full range of the Centre's activities. These activities are of four basic bout related types. The first is developing and producing instructional materials for various public and private organizations (e.g., the Bureau of Statistics, Lesotho Family Planning Association, Catholic Relief Services). The function usually involves the client organization in needs assessment while the Centre (acting in a supervisory capacity) gives advice and estimates costs before it gets involved in training people or developing and training materials. The second is helping students study privately for certificates at the junior (after three years of secondary education) and "0" (after 5 years of secondary education) levels. The Centre offers courses in modern mathematics, bookkeeping ad commerce, English, and agriculture. These courses entail the use of printed materials, radio broadcasts, intensive weekend-instruction sessions, or all three. The third activity, still in its preliminary stages, is addressing the basic educational needs of young drop-outs (particularly boys). Early efforts in this direction include the development of games aimed at improving the players' literacy and numeracy skills, the completing of surveys and basic research aimed at defining the needs and problems of this group, and drawing up a proposal (that UNICEF agreed to support in part) for developing learning materials with appeal to this and other disaffected groups. The fourth activity is producing booklets on practical subjects, such as cooking and first aid, for distribution to rural adults. A charge, often nominal (U.S. $0.5 in case of the cookbook), is made for all Centre services; but self-reliance, and not profit, is the justification.

LDTC makes special efforts to help public schools make use of its materials. It encourages unqualified primary-school teachers to enroll in its Junior Certificate course by offering them fee reductions. It has also distributed three of its newly developed learning games to primary-school teachers on an experimental basis. At the secondary-school level, teachers who double as LDTC tutors unanimously claim that the training and courses materials they receive at the Centre help them teach better in the classroom. In addition, some secondary schools carry LDTC's Junior Certificate materials in their libraries, and others have incorporated LDTC's broadcasts into regularly scheduled courses.

Since 1976, LDTC has gradually been moving under government auspices. Now officially a project of the Ministry of Education, LSTC is taking on an ever-increasing percentage of Basotho staff at the top administrative levels and has acquired new headquarters on the Lerotholi Polytechnic campus.

RESULTS:

LDTC spends more time and other resources assessing the needs of its target audience than evaluating the final results of its product. The evaluation that does take place tends to be conducted on a project by project basis, and highly readable and carefully wrought reports (which are available to the public for the cost of postage) serve as guides to other education and development planners. A sampling of these reports imparts a feeling for the Centre's methods of research, priorities, and range of interests, but does not provide a precise measure of LDTC's impact.

A few LDTC projects have been assess in quantitative terms. For example, a questionnaire filled in by the nurses at the Catholic Relied Service-sponsored clinics revealed that 20,000 copies of the cookbook produced by the Centre for CRS had been sold as of April 1976, that nurses believed that the books should be distributed to all women not just clinic patients), that the number of recipes should be increased, that more recipes should call for only home-grown ingredients, and that more should be simple. (A parallel poll of the cookbook buyers confirmed these findings, which were made the basis of the revisions on the second run of 10,000 booklets.)

LDTC's staff, which numbered six in 1974, had grown to forty by 1977. In those same three years, the number of project it was involved in during a single year grew from one in 1974 to four in 1977. In like manner, its economic base has grown more solid: in its first year of operations, its credits and debts balanced at around $30,000; at the end of its third, its operating budget had increased by a factor of five and it had a small surplus with which to begin the new year. Student enrollment in courses of all types increased form 50 in 1974 to 840 in 1977, while the number of agencies to which the Centre contracted its services increased from two to ten. During 1977, about 20,000 booklets were distributed to individuals and groups.

OF NOTE:

- REKA ("Shopping." which is based on the University of Massachusetts' "Mercado" game), one of the games developed by LDTC to promote numeracy, uses two packs of cards—one represents money and one represents familiar goods. The game can be played at two levels of difficulty; one form usually entails good-natured shouting matches between the player designated as the shopkeeper and the "consumers."

- LDTC carries out research related to its activities. Typical publications include "A Test of the Best Way to Present a Correspondence Lesson," Literacy in Lesotho," and "An Experiment with Educational Radio Spots." A major LDTC publication is Understanding Print, a continuation of the work of Holmes, Fuglesang and others on the way in which rural people understand illustrations and printed texts.
- A persistent problem LDTC encounters as a service agency is getting by financially during the time it takes for approved projects to receive funds.
- LDTC designed and produced handbooks, a newsletter, and a poster for the Thaba Boisu Rural Development Project agents in charge of marketing improved seeds and fertilizers in rural Lesotho. Is also worked up eight one-minute radio spots for the project and issued a short evaluative report on the overall effort.

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Games to Learn by," Lesotho Distance Teaching Centre, undated.

Clearinghouse on Development Communication
January 1978

MAURITIUS COLLEGE OF THE AIR
MAURITIUS

TARGET AUDIENCE:	Mauritius adults and children, especially those in unsubsidized secondary schools
OBJECTIVES:	To provide educational opportunities to learners outside the school system and to enhance in-school programs
MEDIA:	Radio, television, printed matter, interpersonal communication
DONORS/SPONSORS:	The Mauritius Ministry of Education, the Voluntary Committee on Overseas Aid and Development, Technical Assistance: The International Extension College (Cambridge, U.K.)
DURATION:	Established in 1972; ongoing
CONTACTS:	Mrs. M. Seetulsingh, Head, Production and Administration Department, District Courthouse, Moka, Mauritius

DESCRIPTION:

Chartered in 1971 and organized in 1972, the Mauritius College of the Air (MCA) is an education center staffed by fewer than 20 people and committed to the use of radio, television, correspondence, and face-to-face contact to reach Mauritians both within and outside the traditional school system. MCA's primary in-school audience has been the roughly 80 percent of all secondary school students enrolled in private schools (which receive little government aid). Its other constituents include teachers, students of vocational technology, business students, government employees, and other groups bound by special interests or needs.

MCA's orientation is practical in two ways: the college was designed to enhance rather than to replace the existing school system, and its courses cover what it considers most vital to the country's future well-being. The college's attempt to upgrade instruction at private schools amounts to the attempt to equalize educational opportunities since such schools typically have less qualified teachers and both poorer and fewer teaching materials than their government counterparts do. The college's claim to serve national goals has led to involvement in community-development campaigns, in

career counseling, in vocational education, and in teacher training.

In conjunction with in-school programs, the MCA provides each participating class with a television set and a radio, and each student with several 30-40 page instructional booklets. It also conducts seminars for classroom teachers (at which the coursework is previewed and evaluated, and related class projects are planned). Since 1973, programs conducted in secondary schools also feature a liaison service: liaison officers report on teachers' interest in and response to seminars and classes while keeping the teachers informed about the MCA's activities.

Nonformal education projects have characteristically involved radio broadcasts backed up by regularly scheduled tutorials or seminars and by printed self-study aids. Some such projects have allowed individual learners to progress at their own pace, while others have been geared toward group learning.

RESULTS:

The number of students/subjects enrolled in MCA's secondary school courses increased from 3,432 in 1973 to 12,120 in 1974. The number of schools that volunteered to cooperate during that same period increased from 34 to 61. By 1976, however, the participation had declined to about 7,500 students/subjects in 44 schools—a direct reflection of MCA's commitment to the program vis-à-vis its other commitments.

Self-evaluation has been a chief determinant of MCA's evolution. The college has dropped Creole-language broadcasts in conjunction with on-the-job education programs because the courses seemed too demanding for the audience. It has dropped some of its industrial arts courses for want of trained instructors and curricula specialists. It has also de-emphasized its independent study courses in the belief that the college's resources should be marshaled to serve the many rather than the few. On the other hand, its successful involvement in Ma Vie Demain (a family planning campaign sponsored by the government) and in multi-media correspondence courses (such as "The Language of Business" for professionals) will influence its future direction.

The Mauritius College of the Air will in the future develop a public awareness program on the trade union movement, set up study centers and tutorial services for children and adults without access to traditional schools, strengthen its self-evaluation capabilities, and develop

basic communication and numeracy courses for primary school drop-outs.

OF NOTE:

- Participants in the teacher-training courses were given the option of taking a course in one year, 18 months, or two years, and were not forced to decide until after they had worked the first lesson of the series.
- In 1973, the Ministry of Education offered to increase its financial and technical assistance to MCA if the college would intensify its involvement in secondary schools and scale down its experiments in nonformal education. The fivefold increase in student enrollment that followed led to the first direct government subsidy in 1974.
- The MCA maintains close ties to the colleges set u l Botswana and Lesotho by the International Extension College.
- The practical courses selected to replace subjects like Bible knowledge, British Constitutional History, and Latin in the secondary schools were introduced at the Form I level since examination pressures are weakest level.
- Efforts once channeled into now defunct agriculture education programs will soon be redirected into the government's national "Grow Your Own Food" campaign.
- When an increase in the cost of textbooks coincided with a book shortage in January 1977, the demand for MCA courses increased.

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Clearinghouse on Development Communication
October 1977

RADIOPRIMARIA
MEXICO

TARGET AUDIENCE:	Primary-school children (especially fourth, fifth, and sixth-graders) in the environs of the city of San Luis Potosi (approximately 2,075 children in 1975)
OBJECTIVES:	To increase the number of primary-school children served by six-grad primary school without increasing the cost of the public education system
MEDIA:	Radio, print, some visual aids, and interpersonal communication
DONORS/SPONSORS:	Mexico's Secretariat for Public Education
DURATION:	Begin in 1970 after a one-year pilot; ongoing as Audioprimaria
CONTACTS:	Concepcion Rivera Guzman, Directora, Radioprimaria, Mexico's Secretariat for Public Education, Direccion General de Materials Didacticos y Culturales, Mexico; Peter L. Spain, University of New Hampshire, 53 Frost Dr., Durham, NH 03824. U.S.A.

DESCRIPTION:

Radioprimaria is a response to a shortage of teachers that is itself a reflection of a shortage of educational funds. It was designed by Mexico's Secretariat for Public Education (SEP) to increase the number of Mexicans primary schools at which instruction at all six-grade-levels is offered. In practical terms, it enables one teacher to handle the three higher grades by shifting part of the teaching burden to the radio. The governing idea is that four teachers plus educational radio broadcasts can do the work of six teachers and do it at a relatively low total cost. The radio is not supposed to replace or displace classroom teachers but to buttress and to extend their efforts. It was originally intended to permit four and five-grade schools to offer the complete primary curriculum and primary certificates.

The instructional radio lessons are prepared by eight radio teachers in DGEAD's (Direccion General de Educacion Audiovisual y Divulgacion) broadcast studios in Mexico City. They are then bussed 260 miles northwest to Station XEXQ at the University of San Luis Potosi, which broadcasts then without charge from 9:00

a.m. to 1:45 p.m. on Monday through Friday. These lessons typically occupy 90 minutes of each five-hour school day. Eighty percent of them are directed toward all three upper grades, while the remaining 20 percent are geared toward specific grades. All make repeated reference to the textbooks distributed free by SEP to all Mexican primary schools, all are discussed in a fortnightly mimeographed teacher's guide and program schedule ("Correo de Radioprimaria"), and a few are accompanied by visual aids. The 563 programs needed for a school year are broadcast at the rate of four per day and focus on Spanish, arithmetic, science, and social studies.

Radio-classroom teachers, most of whom commute either daily or weekly between their homes in the city and the rural communities they serve, are given an introduction to the Radioprimaria system, but teacher turnover is so great that some confusion and misunderstanding on the part is inevitable. Similarly, they are supposed to be subject to supervision and periodic on-the-job inspection, but controls have been exercised in a hit-and-miss fashion. On the other hand, much is required of both the inspectors and the teachers. Inspectors, for example, are expected to furnish their own transportation for the use on the job, while many teachers personally supply the classroom radio. Neither transportation nor radio is provided systematically by SEP.

Enrollment in Radioprimaria has fluctuated. Originally, 49 schools (and some 2,800 children) representative of those eventually to be served by a nationwide Radioprimaria system were involved in the program. The number of involved schools dropped for several consecutive years before climbing to 65 in 1975. However, the Radioprimaria lessons are now directed only at fifth-graders, so the total number of children reached by Radioprimaria is smaller (2,075).

Other changes of importance are the switch to a larger radio transmitter in 1973, which expanded Radionprimaria's reach by 20 to 40 kilometers in all directions, and the introduction of a new lesson format in 1974 that features dramatized interchanges between teacher and students instead of lectures.

RESULTS:

The lack of strictly comparable control groups, reliable enrollment statistics, and other evaluative tools clouds the meaning of data on Radioprimaria's impact. However, investigations of the project's effectiveness have been quiet far-reaching, taking into account

community attitudes toward education in general, employment patterns and prospects, and both technical and administrative pitfalls, as well as scores and other conventional indicators of educational success.

Children in the radio classrooms perform at least as well as their counterparts in regular classrooms do on standard achievement tests. But this finding must be viewed in light of the fact that the great majority of radio classes (an estimated 80 percent) are in schools that had six grades before the project began (and are thus not the intended beneficiaries). Moreover, power failures, other technical problems, a lack of administrative guidance, shortages of resources, and teachers' reluctance to use the system have all militated against Radioprimaria's success. When 44 radio schools were visited by evaluators in 1972, for example, one was inexplicably closed while 18 others were not making use of the radio lessons.

Surveys conducted in 1972 of teachers' pedagogical beliefs, the activities of primary-school graduates in the San Luis Potosi area, attitudes of rural people in the area toward rural education, and the local job market revealed that students, their families, their teachers and their perspective employers regard a primary certificate as an employment credential that is necessary but not sufficient. These studies showed that few primary-school-graduates make a practical use of their education and that while most do not leave their hometowns, the few who do move to the city cannot expect their schooling to win them jobs in an employment market flooded with secondary-school graduates.

OF NOTE:

- Most lessons are used year after year, so a child who has spent three years in a radio classroom has heard some of the taped broadcasts three times.
- Before 1975 (the last year the project covered students other than fifth-graders) students in radio classrooms were expected to engage in private study while lessons not intended for their grade were broadcast.
- Well over one hundred schools request the Correo, even though only 65 of them make use of the radio broadcast. Apparently, the Correo helps teachers in ordinary classrooms prepare their courses.
- An objective of the Radioprimaria at the project's outset was to extend educational opportunities to people over 15 who had not finished primary school. Nothing has been done to realize this objective, however.

- Although public education commands the largest single share of Mexico's national budget, only about a fifth of Mexico's primary schools have the full six grades.
- Radioprimaria is though to have a large incidental audience composed of adult listeners in Mexico City and San Luis Potosi. Some broadcasts are also picked up by classrooms not involved in the program, though the number is not known.

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Clearinghouse on Development Communication
July 1978

TARAHUMARA RADIO SCHOOL
MEXICO

TARGET AUDIENCE:	Children and other residents of the Tarahumara Sierra (especially its 50,000 Indians)
OBJECTIVES:	To meet the practical and academic needs of Tarahumara Indian children and adults by increasing their social and employment opportunities while reinforcing their cultural identity
MEDIA:	Radio (until 1974), printed materials, and interpersonal communication
DONORS/SPONSORS:	The Catholic Church as represented by the Vica Apostolic of the Tarahumara region; limited support from agencies of the Mexican Government
DURATION:	Begun in 1955 as extensions of the 50-years-old Jesuits-run education programs; granted legal status as part of Mexico City's Iberoamerican University in 1957; ongoing in modified form (without radio)
CONTACTS:	Director, Jesuit Mission Headquarters, Sisoguichi, Mexico; Sylvia Schmelker de Sotelo, Centro de Estudios Educativos, Avenida Revolucion 1291, Mexico 20, D.F. Mexico

DESCRIPTION:

The Tarahumara Radio Schools (TRSs) have roots in the Jesuit missions that have operated in the Sierra Tarahumara since1900. But while the charter of the children's boarding school that opened in 1900 called for eradication of "barbarism, pagan atmosphere, and ignorance," the schools have not weathered pedagogical revolutions unfazed. Emphasis now falls upon practical education informed by Freirean precepts—though the sobering difference between goals and achievements, particularly with respect to reaching the target audience, cannot be denied.

The 1970s have been uneasy times for the TRS's. Alarmed by high dropout and absentee rates and aware that the schools were benefiting primarily the Spanish-speaking population rather that the Indians for whom they were principally intended, TRS project authorities asked the Centro de Estudios Educativos to assess the

schools' impact. In 1971, members of the Mexico City-based research organization visited the Sierra Tarahumara to collect information on TRS teachers, students, graduates, and the families of students. To redefine the objectives and functions of the schools, they had first to calculate the true impact of existing objectives and functions.

At the time of the study, 46 schools that together served 1,081 students dotted the ten Sierra municipalities. Each school had one or two auxiliary teachers. These auxiliaries, themselves educated only through primary school, organized the classes around the radio broadcasts (of government-selected curricula) transmitted centrally from mission headquarters in Sisoguichi, counseled students and checked their work, and attended summer training courses in teaching methods and the subject they taught. The classrooms they supervised typically contained students of all four primary grades. To accommodate the mixed needs of all students, the radio programming covered a different subject each hour, devoting 15 minutes to each grade level. Students tuned in for one quarter-hour segment each hour, completing written exercises for the remaining 45 minutes until a new subject was taken up. Five of the 46 schools open in 1971 were boarding schools whose students returned home on the weekends.

Several sweeping changes had taken place by 1975, the most important of which was that radio use was dropped entirely. In addition, summer courses for auxiliary teachers had replaced the goal of proficiency in subject matter and methodology with that of mastery of local customs and language. New bilingual teaching methods had been put into use, the unitegrated schools had been shut down, and both school supervision and materials had been upgraded.

RESULTS:

While the lengthy statistical analytical evaluation conducted in 1971 showed that the TRSs prepare fourth-grade students about as well as do school in the capital, such a tiny proportion of TRS students finished the fourth grade that the more important questions relate to the determinants of enrollment in and completion f the courses. To answer such questions, the research team identified many predictors of success in the children's socioeconomic environment.

Tarahumara Indians, few of whom speak Spanish and thus comprehend the Spanish broadcasts, faired less well than their non-Indian peers in overall mean

achievement (in language but not arithmetic skills) and were much more likely than their counterparts to fall farther behind as advanced through the grades. These results, researchers contend, together suggest that cultural and linguistic factors militated against the Indian children in the program. Variables that correlated with inter-year dropout rates included opportunity costs (what it costs to replace or do without a child's help at home or work), the level of child's father's education, and the child's ethnic background. To the population sample, education appeared to have more to do with prestige or with some notion of school as an innate good than with the expansion of employment opportunities—a finding confirmed by employment data as well as by interviews with students, graduates, and their families.

The evaluation, which was used as a basis for some of the changes made in the program in the early 1970's, also covered teachers' qualifications and duties, school policies, and curriculum.

OF NOTE:

- Since 1971 the Tarahumara Sierra has been the site of Presidential visits and of development activities sponsored by the National Indian Institute, the Administrative Committee for the Federal Program of School Construction (which has built boarding schools to prepare Tarahumaran community-development workers), the Ministry of Public Works, and the National Institute of Rural Community Development. The thrust of the projects initiated by these agencies is toward the integration of the Tarahumara into Mexico's national life.
- Radio use was discontinued partly because delays caused by equipment failures interrupted the flow of instruction.
- One reason the reforms proposed after the 1971 study failed is that missionaries with 15 years of experience in the radio schools were understandably leery of adopting sweeping changes suggested by outsiders. They also resisted the idea of shifting the program's emphasis away form reaching young children.
- Although designed from the beginning to serve young children in a formal school setting, the TRS's were influenced by Columbia's Radio Sutatenza—a nonformal education program primarily for adult *campesinos*.
- Some of the factors that have governed the evolution and reform of this project are these that impede "education for development" in many Third World countries. The Sierra Tarahumara is an agricultural region, one of Mexico's remotest and

mountainous areas. Its dispersed population consists of Indian and non-Indian (mainly *mestizo*) groups that have not mixed except in commerce, and its resources have been exploited primarily by non-Indians and outside companies.

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Clearinghouse on Development Communication
July 1978

RADIO MATHEMATICS
NICARAGUA

TARGET AUDIENCE:	Primary-school children in Nicaragua
OBJECTIVES:	To develop a prototypical system for teaching elementary mathematics
MEDIA:	Radio, reinforced by classroom instruction, and printed materials
DONORS/SPONSORS:	The Technical Assistance Bureau of the U.S. Agency for International Development; the Government of Nicaragua
DURATION:	Initiated in July of 1973; ongoing through June of 1979
CONTACTS:	Dr. Klaus Galda, Institute for Mathematical Studies in the Social Sciences, Ventura Hall, Stanford University, Stanford, CA 94505, U.S.A.

DESCRIPTION:

The Radio Mathematics Project is an attempt to design and broadcast elementary math lessons that hold children's interest. One part of the project is curriculum development. Another is the creation of a way to use performance data to revise and improve the lessons. A third is the analysis of the mathematical skills and concepts taught in the lessons. Underlying all three activities is the development of radio as an instructional medium.

The project began in July of 1973. Once that staff had selected the site, it prepared a detailed research plan and tested sample lessons in California schools. By mid-1974, the Nicaragua office was organized and was developing both achievement tests and procedures for the program. By 1975, 150 lessons were being used in 16 experimental classrooms. More than 85 first and second-grade classes were using the radio math lessons as of summer of 1976.

Each radio math lesson consists of a 30-minute recorded portion and a post-broadcast portion conducted by the classroom teacher with the help of a two-to-three-page guide. A typical lessons consists of many discrete instructional and entertainment segments, all but a few of which require an average of four active responses (writing answers, responding aloud, singing) per minute

from the student. The lessons rely on little direct explanation, cover many topics, and elicit several kinds of responses from the children. Post-broadcast activities take up at least 30 minutes and involve use of the blackboard. Until 1975, worksheets were also part of almost every lesson.

RESULTS:

A year-end achievement test given in 1975 showed that children in classes that used the radio math series scored 21 percent higher than their peers who studied math in a traditional learning environment. The second-year evaluation revealed an even greater disparity. First-graders performed 60 percent better than their counterparts in the control group, while second-graders had a 29 percent edge over their counterparts.

At the close of the 1975 school year, 73 percent of the participating teachers said that the children in the radio math program learned more than they would have in the conventional classroom. Nine-two percent voiced the hope that the radio instructional program would continue.

With AID support, the Radio Mathematics Project has been extended through June 1979. Current efforts revolve around revising the curriculum, experimenting in the use of radio instruction without the worksheet component in order to cut costs, and extending the radio project to include students in higher grades.

OF NOTE:

- One lesson in the Radio Mathematics series was awarded the Japan Prize in the 11th bi-yearly International Education Programme Contest, to which 92 organizations from around the world submitted entries.
- The Radio Mathematics Project was expanded at the behest of the Nicaraguan Ministry of Education to bring radio lessons to three different departments of the country.
- At least once a month in every radio program, students are invited to respond actively to what they hear.
- Bottle caps and other locally available cost-free items are used in classrooms as counting aids.

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Clearinghouse on Development Communication
June 1977

TELE-NIGER
NIGER

TARGET AUDIENCE:	Nigerian children between the ages of about seven and twelve (approximately 700 children in the pilot piece and 9,000 children in 1975)
OBJECTIVE:	To provide rural children with an education that will equip them for rural life and that will in general foster rural development and not urban migration
MEDIA:	Television, printed materials, and interpersonal communication
DONORS/SPONSORS:	The French Government (through 1971) and the Nigerien Government
DURATION:	Conceived in 1963, implemented in 1964; ongoing
CONTRACTS:	L. Theresa Silverman, Assistant Professor, Department of Journalism & Mass Communication, New York University, 1021 Main Bldg., New York, New York 10003, U.S.A.; Max Egly, L Agence de Cooperation Culturelle et Technique, 13 Quai Andre Citroen, 75015 Paris, France

DESCRIPTION:

With the education mandate of the 1961 UNESCO meeting of African ministers still fresh in its policy-makers' minds and with only 5 percent of its school-aged children enrolled in classes in that year, Niger began an assessment of its educational sector that prompted it to ask France for help in reforming and expanding existing educational services. Talks between representatives of the two nations got underway in 1963, and by 1966 Tele-Niger was a reality to the 22 monitors and the roughly seven hundred children involved in the pilot phase. Designed to test the effectiveness of "active education" in a setting typified by shortages of money, technical skills, hardware, and training teachers, the project reflects Niger's commitment to meeting the educational needs of rural folk without turning schooling into either a passport to overcrowded cities or into a mold an agricultural stereotype. In the shorthand of pedagogues, the project's goals are ruralization, integration, and dynamism.

Television was selected as the primary educational medium for several reasons. It obviates the need for highly skilled teachers. It is capable of reaching remote areas on a regular basis. It is democratic, insofar as all

the children in the original classrooms receive teaching of the same quality and insofar as "television teachers" cannot very well play favorites. Moreover, the French were willing and able to provide the technical assistance that a television operation would require. Another factor related to the use of television, the utter novelty of TV in Niger, was exploited creatively and to advantage but was apparently not decisive at the planning stages of the project.

A key feature of Tele-Niger is the presence in every classroom of a monitor. Subjected to ten weeks of in-service training, semi-annual refresher courses of from seven to ten days each, regular meetings with counselors, and brief TV broadcasts designed to clarify lessons and duties, the monitor in equipped to handle the children's questions and typical classroom crises. Yet, it is axiomatic that the monitor not be a highly educated professional: using skilled labor where semi-skilled labor is more than adequate would defeat part of the project. More important, the monitors as a group have greatly surpassed the expectations of those who designed the project and hired them, perhaps because the monitors lack of preconceptions allowed them to be quite open-minded and empirical in their supporting roles in the classroom.

The production of the television programs, originally but no longer in the hands of French experts, takes place at studios in Niamey. Production equipment is fairly simple —video tape recorders, cameras, work rooms, storerooms, transmitters and a few other pieces of hardware—but production values have kept curriculum specialists and technicians from falling into ruts. The ingredients of each program (manual activities, games, skits, written exercises, etc.) vary from day to day, and the effort required to keep the math teach apprised of what the French teacher or geography teacher is up to can be exhausting. This effort bears fruit, however, and some production features have survived evolution and perpetual experimentation: the "pedagogical variety show", "diversified repetition", review via concise "commercials" for previously studied concepts, and the treatment of each lesson as both a self-explanatory component and a part of a broader package of programmed instruction have proved their worth and weathered well.

RESULTS:

No rigorous evaluation of all aspects of Tele-Niger has ever been conducted, partly because research was from the beginning accorded less priority than production and partly because no control group was isolated in the early

days of the project to use as a basis of comparison. Outside observers have, however, conducted several small scale studies, and in-house formative research has been conducted routinely since the inception of the project. The key components of this internal research have been anthropological descriptions of local culture by the foreign staff, studies of how Nigerian children relate to the pictorial image, interviews with village children, recorded observations of the dynamics of the classroom, and feedback culled from the written work of the Tele-Niger participants.

What has been established to the satisfaction of the Tele-Niger staff is that the TV classrooms are not besieged by the problems that surrounded the traditional Nigerian classroom: poor attendance, high dropout rates, and a high incidence of grade repetition. The dropout rate among regular primary school students in the 1960s, for example, approached 40 percent while 674 of the original 716 students enrolled in Tele-Niger classes in 1966 finished the four-year cycle in 1970 (a dropout rate of less than 6 percent). Similarly, the children were loathe to skip school: a one-week experiment in which the classes were unmonitored revealed that attendance and attention in the unsupervised classrooms remain high. A later UNESCO study corroborated these findings: its executors found that the content, if not the language, of the broadcasts was truly local, that the programming encouraged openness to experience as well as knowledge acquisition, that the medium of television was exploited positively and creatively, and that the project made good use of semi-skilled people in the classroom. Finally, the project has expanded to include some 9,000 students (some of them urban) and has been taken over completely by Nigerians.

The problems identified in various studies relates to the use of French in the broadcasts and to the quality of education received by students in the television classroom. In particular, TV students performed less well than students in the traditional classroom in standardized and grammar tests. To help assuage this problem, a fifth year was added to the televised curriculum in 1970.

OF NOTE:

- All but the simplest camera shots were avoided until the children became accustomed to the medium of television. Close-ups, angle shots, cutaways, and other sophisticated techniques were introduced only gradually, so that the students were not forced to come to grips all at once with an alien visual language.

- The appeal of television's "concrete" message has proved strong in Niger, where "truth" is defined as knowledge based upon what can be seen and where the language of instruction (French) is not the language spoken in the students' immediate environment.
- The commitment of the television teachers to the new methods was shaky in the early years of Tele-Niger both because they were ill-served by their training in established teaching techniques and because they tended to fell they would eventually return to the conventional classroom.
- The minimum age of admission to the Tele-Niger program was established on the basis of a traditional Nigerian concept of maturation, Lakkal – a combination of intelligence, savoir-faire, acceptable social behavior, power of memory, and the ability to adapt.
- The chief difference between the Tele-Niger approach to education and the conventional Nigerian approach relates to the child's verbal expressiveness. Traditionally, a Nigerian child is expected to be silent in the presence of adults, whereas the Tele-Niger approach emphasizes a child's right to question and respond vocally to his environment and to adult company.
- The Tele-Niger approach has been schematized as a "double funnel": children are encouraged to gather raw materials and data from real life, to analyze and order that knowledge and those materials in the classroom, and to reintegrate what has been learned into quotidian life.

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Clearinghouse on Development Communication
April 1978

RURAL RADIO EDUCATION PROJECT
PARAGUAY

TARGET AUDIENCE:	Rural out-of-school children and adults (approximately 700 students in 1978)
OBJECTIVES:	To provide primary level instruction to rural people via radio; to experiment with different methodologies and techniques for providing rural radio education; to help the Ministry of Education and Worship in Paraguay institutionalize mechanisms for making rural radio programs feasible and effective
MEDIA:	Radio, print, and interpersonal communication
DONORS/SPONSORS:	The Center of Tele-Education of the Ministry of Education and Worship, Asuncion, Paraguay, and the U.S. agency for International Development
DURATION:	Begun in 1976; ongoing
CONTRACTS:	Lic. Mabel Palacios Moringo, Directora, Centro de Tele-Education, Ministerio de Education y Culto, Asuncion, Paraguay; Donald Swanson, Academy for Educational Development, 1414 22nd St., N.W., Washington, D.C. 20037, U.S.A.

DESCRIPTION:

Paraguay's Ministry of Education and Worship became involved in the production of educational radio broadcasts four years before the Rural Radio Education Project (RREP) took shape. Since1972, it had supported the annual production of between 50 and 60 hours of radio programming for use in primary and secondary schools. Sponsoring RREP thus entailed the expansion, rather than the creation, of administrative and technical capabilities in order to produce roughly 300 hours of programming per school year. With five-to six fold increase in production, the Ministry hopes to offer rural Paraguayans, many of whom have no access to schools with full six –grade curricula, the chance to complete primary school. Accordingly, the Department of Caaguazu was selected as the project site because its educational needs and handicaps are typical of rural Paraguay's and program emphasis was placed on courses at the upper primary grade levels.

The Department of Tele-Education spent 1977 designing the radio curriculum and the instructional materials, preparing and pre-testing radio lessons, and conducting on-site research activities. During this period, department members developed 540 instructional programs at the third and fourth-grade levels, along with companion material in print, and made plans for producing these radio programs. Their research efforts consisted primarily of studying the student-age population of Caaguazu and its radio-listening habits, and of selecting four towns in Caaguazu as test sites and organizing project centers in them.

The second year of the project, 1978, was dedicated to improving and building upon the foundations laid during the first. The first 540 programs went into production while outlines for the second 540 (the fifth- and sixth-grade lessons) were drawn up. Broadcasting via a commercial radio station began, and research activities and field-testing continued.

On the brink of full-scale implementation, the project as of mid-1978 serves over 700 students and includes 45 learning centers (at which anyone with two years of formal schooling can take RRFP's entrance exams and students in the program meet in groups and receive the help to volunteer monitors). The completed lessons cover language (including Spanish as a second language), mathematics, social studies, science, health and nutrition, and communication. These lessons are broadcast in 15 to 20 minute programs on weekday.

RESULTS:

The Rural Radio Education Project's evaluation component has not been running long enough to permit an evaluation of learning gains. However, evaluation activities have been conducted in conjunction with this project since its inception, and preliminary findings have influenced the project's evolution. High interest among members of the community (particularly with respect to enrollment and attendance) and among radio-station owners (who have volunteered to rebroadcast programs and to dedicate prime time to some RREP broadcast) are especially positive indicators of the project's impact. These indicators make some of the potential handicaps uncovered in baseline and first-year research – the prevalence among the listeners of serious social problems such as alcoholism, for example, and the difficulties posed to some RREP students by Spanish-language broadcasts – easier both to cope with and to put into perspective. Formative evaluation efforts have also showed that listening audience has a strong interest

in music and sports, one of many findings that poses no problems but gives the programmers some guidance.
The first comprehensive evaluation of student gains will get under way in March of 1979 at the end of the first full cycle of classes. Eventually, cost-benefits analysis will be conducted, the effectiveness of the various program components (radio, monitor/aid, etc.) will be assessed, and the relative gains made in all the communities involved in the project will also come under scrutiny.

OF NOTE:

- The use of free commercial radio in fundamental to the conception and the success of the Rural Radio Education Project.
- To meet the mixed demands of the learners, the educational broadcasts are in Guarani and Spanish while all the printed supplementary materials are in Spanish.
- Broadcasting began under extremely adverse conditions. Production took place in a borrowed studio, and power failures in both the stations and the listeners' homes were frequent.
- Before curriculum design could proceed apace, the Ministry of Education had to agree upon a precise definition of "primary instruction". Only then could the Ministry successfully undertake the formidable task that took up the first year if the project – creating from scratch a rural radio primary-school curriculum.
- A special series of Saturday-morning broadcasts aimed at familiarizing the population of Caaguazu with radio-education techniques was conducted throughout the first year of the project. The broadcasts were also used to win over regular schoolteachers, many of whom felt threatened by the new system.
- A series of pre-project interviews revealed that 70 percent of the population regarded agriculture as the most important lesson theme. Hence, agricultural information and advice are woven into the coursework, particularly into the literacy and language courses.
- Test sites also serve as administrative centers.
- While RREP workbooks have been received enthusiastically, less expensive alternatives to them may have to be developed.

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Clearinghouse on Development Communication
July 1978

THE CANDELARIA PROJECT
COLOMBIA

TARGET AUDIENCE:	Colombian families in the state of Valle (approximately 7,000 people in the pilot phase
OBJECTIVE:	To provide comprehensive health services (with special emphasis on nutrition and family planning) to the rural poor
MEDIA:	Print, calendars, and interpersonal communication
DONORS/SPONSORS:	The Colombian Ministry of Health, the University of Valle Medical School, and the Rockefeller Foundation
DURATION:	University – directed preliminary activities, 1958-1967; Experimental Phase, 1968 to 1974; protect expanded to include other sites, 1974-present
CONTACTS:	Alberto Pradilla, Coordinator, Editor of the Candelaria Papers, Foundacion para la Educacion, Apartado Aereo 2805, Cali, Colombia; Dr. Alfredo Aguirre, Dept. of Social Medicine, Medical Faculty, Universidad del Valle, Apartado Aereo 20353-2188, Cali, Colombia; Jaime Rodriguez, Director, PRIMOPS, Cali, Colombia

DESCRIPTION:

The Candelaria Project was born on information and insights gleaned from several studies and short-term medical interventions conducted between 1958 and 1968. Ten years of research and practice in Candelaria County revealed, among other things, that almost half the areas ore-school children suffered from malnutrition, that the principal causes of childhood illness and death were gastro-intestinal and other preventable diseases, that fewer than 15 percent of the houses in the area were fit for human habitation, and that 84 percent of the homes in the project area had no sewage connections. In short, medical researchers came to the conclusion that the chief determinates of health – indeed, of survival itself – were socioeconomic factors such as income levels, employment rates, and land-tenure practices. At the same time, they found, health resources were scarce and expensive, too much emphasis was being placed upon curative measures and too little on preventive medicine, and both education and the coordination of health services were being neglected.

With these findings uppermost in mind, project planners from the existing Candelaria Health Center developed program aimed at eliminating malnutrition. Because they were convinced that few medical problems require the attention of nightly trained physicians, they designed the project to make maximum use of "promoters," young female paramedics who doubled as health educators. These promoters were recruited from the locales in which they were to serve and received six weeks of training. They were compensated with certificates, Christmas presents and the opportunity to further their training as nurses' aides. Their work consisted of paying visits to every family in their community at least once every eight weeks. During these visits, the promoters looked for signs of malnutrition and for causes of death and disease, gathered data on the health of each family's children, dispensed information on health and nutrition, and identified cases requiring a doctor's care.

Health cards and Mother's Almanacs were distributed routinely by the promoters in this project. A health card was kept for each child under five years of age by the child's mother. The "Almanac" – actually a wall calendar imprinted with visual messages on family planning, infant feeding, sanitation, hygiene, and other health-related subjects – featured different reminders each month.

The promoters formed the backbone unit of the project, but their efforts were integrated with those of a service unit (staffed by nurses, nurses' aides, and midwives) that handled medium risk cases and by a third unit (consisting of a medical student and a registered nurse) that handled the most serious cases.

RESULTS:

The site of various university-supervised medical interventions during the decade preceding the beginning of the comprehensive health project, the country of Candelaria was not a typical community in 1968. Nevertheless, significant positive changes in health status have been registered since the beginning of the family-care program – in spite a 25-percent decrease in purchasing power and a substantial decrease in nutrient consumption during the time under consideration. The overall birth rate fell from between 50 to 60 per 1,000 during 1960-1968 to 45 per 1,000 during the following four years. At the same time, natality rates decreased from between 57 and 60 per 1,000 during the first period to 41 per 1,000 in the second.

General health and nutritional gains have been astonishing in light of reduced economic circumstances. As a result of programs to immunize mothers and

supervise midwives, neonatal tetanus has disappeared from the area. The incidence of diarrheal disease has decreased from 16 percent to 5 percent as a direct consequence of the Candelaria Project, and the prevalence of malnutrition among pre-school children has decreased by 25 percent (by 30 to 40 percent for children who entered the program as infants).

Once the experimental phase closed, the project was expanded and it now covers the whole State of Valle. Like the pilot, the expanded project is aimed at turning every mother into a health "promoter" within her family.

OF NOTE:

- Promoters received continuos in service training aimed at improving their performance and addressing problems encountered on the job.
- Besides motivating the promoters and providing medical care, members of the service unit analyzed the questionnaires and other materials and information collected by the promoters.
- The Colombian Ministry of Health requires all medical graduates of the social medicine program of the University of Valle to serve in a rural area for one year after graduation.
- During the time the project was being designed, a law that would have obligated 18 to 20 year old women to render one year of compulsory social service was under review. The law never passed, but some of the women in question became interested and involved in the project nevertheless.
- In 1966, the Candelaria Project area was identified as one in which "masked infanticide" occurred. In other words, some desperately poor and hurried parents with too many children did not seek medical help when one of their children was stricken by an easily curable disease such as diarrhea and allowed their child to die.
- Some evidence shows that the same socioeconomic factors that determine the health of the rural poor in the project area are radically transforming the structure of families in ways that demand increasingly large social and political sacrifices of mothers.
- The "Candelaria Papers" are now being edited for publication by members of the Fundacion para la Educacion Superior.

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Newer Community Approaches" in Nutrition Programs for Preschool Children, edited by Derrick B. Jelliffe and E.F.P. Jelliffe, Zegreb Ministry of Health, 1975.

Clearinghouse on Development Communication
July 1978

THE DANFA COMPREHENSIVE RURAL HEALTH AND FAMILY PLANNING PROJECT
GHANA

TARGET AUDIENCE:	Between 50,000 and 60,000 residents of 200 villages north of Accra
OBJECTIVE:	To make integrated health services a key part of rural development
DONORS/SPONSORS:	University of Ghana Medical School, with assistance from the School of Public Health of the University of California at Los Angeles, Ghana's Ministry of Health, Ghana's Department of Social Welfare and Community Development, the Planned Parenthood Association of Ghana, the Greater Accra Regional Administration, and the U.S. Agency for International Development
DURATION:	Conceived in 1967; in operation by January 1970; ongoing
CONTACTS:	Dr. S. Ofosu-Amaah, Department of Community Health, University of Ghana, Medical School, Accra, Ghana; Dr. Alfred Neumann, School of Public Health, University of California, Los Angeles, California 90024, U.S.A.

DESCRIPTION:

The Danfa Comprehensive Rural Health and Family Planning Project reflects the goals and priorities of the University of Ghana's Department of Community Health, its parent organization. The Danfa clinic serves rural villagers in much the same way that Ghana University's faculty of medicine hopes its graduates will – by integrating medical and social services to promote community development. The emphases of the project fall on preventive medicine, the health of that family as a unit, and the involvement of villagers in actions and decisions that affect their well-being. All project activities are in some sense educational: the target audience receives new information with which to form a broad understanding of the relation of habit and environment to health, and the medical students who serve on the staff of the clinics gain a realistic perspective on the challenge posed by the village to the university-trained doctor. The Danfa Project has an experimental dimension too, so careful record-keeping and cost analysis have been included in every stage of the project.

Seven villages (including Danfa, the project's headquarters) located north of Accra were selected in 1967 as the first project sites. In informal discussions, the chiefs, other community leaders, and representatives from the then Department of Social and Preventive Medicine (now the Department of Community Health) identified the various communities' felt needs (which varied from village to village), agreed upon the need for a clinic, and made arrangements for the villages to supply skilled and unskilled labor for the project on a regular basis. Through progress was hampered by inhospitable weather (which precipitated employment-related and other economic problems) and by rivalry among the village elders, the clinic opened officially in January 1970. Since then, three other satellite clinics have been added to the project.

The project relies heavily upon community health educators who live in the villages. These aids refer patients to the clinic, recruit the support of indigenous midwives (and invite them to receive training in modern delivery methods), oversee health-related projects in the village, and conduct educational activities. To increase general awareness about family planning, nutrition, sanitation, and disease prevention, these auxiliary health workers use flipcharts in the context of group discussions (held both within and outside the clinics). Their efforts are complemented by those of a team that operates a mobile cinema-van that shows a local-language film on family planning.

As phases of the Danfa Project have been exceptionally well researched and well documented, primarily because the project's expansion was from the start made contingent upon its proven economic and social viability. Among other things, the use of the media, the family planning component, and its cost per patient of providing various levels of health care have been assessed. In addition, extensive research in demography and epidemiology was carried out in the project area prior to the project's inception.

To facilitate research and evaluation related to the family planning services, the project staff divided the project area into four sections. In one, the clinic and its satellites were established. In two others, single clinics were attached to the government's health posts. The fourth district, which received no new facilities or services, served as a control. Extensive study over five years has revealed that the mean acceptance rate of family planning services has been highest where services are most comprehensive, that clinics offering the widest variety of services attract the most participants into the family planning programs, that after the extension of the program in May of 1973 the geographic distribution of acceptors closely paralleled

that of the population in each area, and that some 5,000 visits made to the clinics during the first 30 months of operation led to roughly 2,000 acceptances of family planning devices and methods.

An evaluation of the film was based upon reports made by the health assistants and questionnaires filled out by interviewers. This study showed that the film brought about a positive change (+10 percent) in attitude among its viewers and that the film's emphasis upon spacing rather than limiting births was correctly placed.

OF NOTE:

- Before the Danfa Project began, five of the first seven villages involved had petitioned the government to close down a police post in the vicinity and to turn it into a hospital. They were, they said, "peace-loving people" without need of suck an outpost.
- Preliminary meetings with responsible individuals from the villages involved in the project revealed that the villagers ranked their most pressing needs as those for a hospital, a safe water supply, better roads, more latrines, improved farming practices, more schools, and better transport. Project officials made no effort to distinguish between health problems and other development problems, taking the view that "everything is related."
- Integrating the modern with the traditional, medical school officials agreed at the insistence of the villagers to slaughter a ram at the site of the first clinic to sanctify the ground and appease the gods. They also sponsored a traditional celebratory feast.
- Since 1968, medical students from the University of Ghana have spent part of their community health clerkship in the Danfa Project area.
- Nutrition field workers, family-planning field workers, Red Cross employees, midwives from various African countries, and other community health workers have all attended short training seminars held at the Danfa clinic.
- The chief concerns of the trained medical personnel at the clinics are maternal and child health, the control of communicable disease, immunization, the curative treatment of patients, nutrition, and family planning.

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Clearinghouse on Development Communication
January 1978

THE PILA PROJECT
GUATEMALA

TARGET AUDIENCE:	Working women on a Guatemalan plantation
OBJECTIVES:	To teach women basic ways of improving nutrition and health at home
MEDIA:	Audio-cassettes
DONORS/SPONSORS:	Pan America Health Organization
DURATION:	Completed (operational phase carried out in three weeks of 1975)
CONTACTS:	Royal D. and Susana Fernandez de Colle, Department of Communication Arts, Cornell University, Ithaca, New York 14950, U.S.A.

DESCRIPTION:

The Pan American Health Organization underwrote the Pila Project, a three-week experiment conducted in 1975 to examine ways of getting basic information on health and nutrition to laborers on Guatemalan plantations. The project's directors, Royal D. and Susana Fernandez de Colle, selected Finca Maria de Lourdes, a coffee plantation on the Pacific Coast, as the site for the study.

It was decided to direct the campaign at women because they generally make the basic decisions on food and hygienic practices in Guatemalan households. Preliminary study showed that the plantation's women worked almost continuously during their waking hours. The project therefor focused on the pilas (community laundry centers) as a place where women could learn informally without disrupting their work.

Audio-cassettes were chosen as the medium because they cost little, are simple to operate, and can be played at any time. Nonprofessional actors were engaged to produce 30-minute programs combining health information, music, radio novellas, and miscellaneous spot announcements. Programming was deliberately repetitious, so that women passing in and out of the pilas would be likely to hear and retain specific messages. Successive days' programs often expanded on themes of preceding days. In addition, some programs promised material rewards (such as baby chicks) to women who memorized certain lessons.

A local teenager handled distribution, taking cassettes to the pilas daily, and supervising their use. She adjusted the playing schedule according to when women were present. Other cassettes were distributed for at-home listening using a tape player borrowed from the plantation office.

RESULTS:

According to a follow-up survey, the plantation women enjoyed the tapes, found specific information useful, and were disappointed when the project ended. When asked which part of the tapes they like the best, women mentioned "advice" on health and nutrition matters far more often than the music and novellas.

The survey detected behavioral changes too. Fifty-eight percent of the women interviewed had tried a special recipe that the tapes had described. Maria de Lourdes plantation had a 92 percent rate of second vaccinations against polio and diphtheria. Only 60 percent of the children at a control plantation received their booster shots.

The program also demonstrated that the audio-cassette medium was flexible enough to reach large numbers of women. When the women's working hours changed, the tapes were simply played at different times. The equipment proved appropriate to the task and no breakdowns occurred. Nonprofessional actors and technicians were able to produce quality programming using only inexpensive equipment.

Royal and Susana Colle drew three general conclusions from their experiment. First, communications technology need not be sophisticated to be effective. Second, projects of this sort must be tailored to the individual characteristics of the target group's social environment. Finally, "poverty of information" often prevents rural people from substantially improving their lives.

OF NOTE:

- Each 30-minute radio program combined music, announcements, short talks, stories, and an episode from a novella.
- A more detailed analysis of the project's impact was cancelled due to the 1976 earthquake in Guatemala.
- A tape promised a baby chick for anyone who memorized the procedures for preventing a Newcastle disease in chicks. Over 100 persons learned the phrases and collected chicks the first day the incentive was offered.

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The Pila Project. Cassettes Reach Rural Women" Development Communication Report, April 1977.

Clearinghouse on Development Communication
June 1977

PROMOTORES DE SALUD
GUATEMALA

ARGET AUDIENCE:	Residents of the state of Huehuetenango (population 380,000)
)BJECTIVES:	To empower and se indigenous paramedics to combat infectious disease and malnutrition through both curative and preventive medicine
IEDIA:	Posters, filmstrips, slides, booklets, demonstrations, dramatizations, and interpersonal communication
)DONORS/SPONOSRS:	The Roman Catholic diocese of Hueheutneango; users of the services (the program is largely self-financed)
)URATION:	Begun in 1963; ongoing
:ONTACTS:	Dr. Mary V. Annel, Director, Health Promoters' Program, Jacaltenango, Huehuetenango, Guatemala; Nancy Jean Higgins, 1851 West 244th Street, Lomita, California 90717 U.S.A.; Sr. Ezequiel Gomez, Co-director, Clinica Parroquial, La Libertad, Huehuetenango. Guatemala

DESCRIPTION:

The Maryknoll Sister in Huehuetanango created the Rural Health Promoters' Program (Promotores de Salud) in 1963 in response to the demands of the local Indian people. They intended to coordinate the program as long as their presence was desired and needed, but from the start they planned to turn the project over to indigenous supervisors when the local people had accumulated the required skills and experience. Gradually, that transfer of responsibility is taking place. At the same time, the effort and impact of integrating the formal medical establishment and a network of local promoters (some 375 in 1978) have multiplied. In 1967, the Guatemalan Ministry of Health formally sanctioned the program and began licensing its graduating participants. Its imprimatur, along with the continued support of isolated Indian villagers, has helped the project workers use medicine and education to combat disease, undernourishment, and ignorance of the causes of illness.

Most of the health promoters recruited and trained in this program are Indian farmers with an average of a second-grade education. Most of the promoters are men because the training program requires a speaking knowledge of Spanish as well as an Indian dialect and few village women speak Spanish. Promoters war elected by their communities, which agree to finance the transportation and material costs associated with the early stages of training and to respect both the need for change and the role of the peer-turned-promoter as a change agent.

Six courses make up the core curriculum. Given in week-long units the courses cover (1) motivation, orientation, simple microbiology, common respiratory and gastroenteric illness, and first aid; (2) nutrition, hygiene, well-baby clinics, immunizations, and simple agriculture and cooking techniques; (3) anatomy, medical terminology, common diseases, and vital signs; (4) the reproduction system, the menstrual cycle, fertility, family planning, pregnancy, development of the fetus, parturition, and diseases of pregnant women and the newborn; (5) the promoter change agent, anthropology and culture, traditional and western medicine, mental health, public health, and biostatistics; (6) teaching methods, childhood diseases, group dynamics, and work planning. The courses are conducted in the chief towns of each district by a mobile educational team, repeated at intervals of four to six months, and supplemented by local monthly meetings and annual refresher courses.

Village promoters work as volunteers, performing six major services. They take pre-program census in their villages, conduct monthly well-baby clinics, provide curative medical attention and preventive counseling one to two hours a day, hold meetings at least monthly with adult villagers to discuss basic health concepts, help identify and treat cases of tuberculosis, and participate in the annual vaccination program for children.

The skits, books (including Donde No Hay Doctor), filmstrips, and other media used in Promotores de Salud are developed and revised by the central teaching team, whose members try them out on each other and on groups of trainees. Dramatic presentations of health concepts seem to be particularly effective teaching tools. All of the teaching techniques used are designed for easy transferal by the promoters to village teaching situations.

RESULTS:

Since the health-promoter program was designed to fill in gaps in existing medical services, which in Guatemala

are comprehensive only in cities, one way to gauge the success of the programs is in terms of the amount of work done. According to program records, the average health promoter in Huehuetenango sees roughly 60 patients each month and gives about 50 oral treatments and from 20 to 25 injections. The promoter also instructs each of these patients in preventive medicine related to his disease. In addition, the individual promoters teach an average of three health classes to groups each month and examines approximately 30 children in a well-baby clinic.

The regional impact of these services is impressive. In 1973, the health profile of Jacaltenango (the program's center) was notably better than that of Guatemala on the whole. For example, the mortality rate for newborns throughout Guatemala was 35.9 per 1,000 births, while the rate in Jacaltenango was 15.5 per 1,000. For babies one to twelve months old, the rates were 55.9 and 16.9 per 1,000 births, respectively. For children one to four years old, the national rate was 32.1 and the rate in Jacaltenango was 19.3.

Other evidence strongly suggests that where the health-promotion scheme is well established, consultations with visiting MDs consist largely of cases referred by the promoters. For treatment for diarrhea and other common complaints, the villagers now seem content to rely upon paraprofessionals.

OF NOTE:

- Huehuetenango is a founding member of the Community Health Association, an organization of private Guatemalan health programs designed to improve health care, teaching, and communication among its members.
- In some anatomy lessons, the bodies of the instructor and the promoters-in-training serve as "charts." Such frankness is thought to help promoters overcome any shyness and to help them feel comfortable and competent treating patients.
- The promoter will do their part for the "Year of the Child" (1979) by giving simple courses for school-age children, who in rural Guatemala often care for their younger brothers and sisters.
- Eventually, the supervisors will completely direct the health-promoter program. The present directive board includes a Maryknoll Sister-doctor and nurse, a local co-director, and a four-member commission elected by the supervisors.
- Other programs sponsored by the Roman Catholic diocese of Huehuetenango include training programs in agriculture techniques, communication

skills, home arts, nutrition, midwifery, religion, literacy, and civics.

- Effort is made to upgrade the literacy level of the health promoters, but the same time the training and reference materials are kept simple (on the 2nd grade level) and highly pictorial.
- Course expenses and salaries for local supervisors are generated by the sale of medicines at a fixed price. No chares is made for the promoter's consultation.

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Clearinghouse on Development Communication
January 1979

RADIO DOCTEUR
HAITI

TARGET AUDIENCE:	Haitian adults of reproductive age (roughly 2,500,000 men and women)
OBJECTIVES:	To provide information and advice on family planning, nutrition, common illnesses, maternal and child health, and related topics
MEDIA:	Radio, cassettes, print, and visual aids
DONORS/SPONOSRS:	Haiti's Ministry of Health, the Ministry of Education, Radio Nationale, and Radio Lumiere
DURATION:	Begun in 1967; ongoing
CONTACTS:	Edith Hollant, Centre d'Hygiene Familiale, 10, Premiere Impasse Lavaud, B.P. 430, Port-au-Prince, Haiti, Dr. Ary Bordes, Centre d'Hygiene Familiale, 10 Premiere Impasse Lavaud, B.P. 430, Port-au-Prince, Haiti

DESCRIPTION:

The Radio Docteur program was conceive by Dr. Ary Bordes (the present director of the Centre d'Hygiene Familiale and Chief of the Division of Family Hygiene of the Ministry of Health) in 1967 when Hurricane Flora spelled a temporary end to all broadcasting in Haiti, save that of a single station, Radio Lumiere. The disaster bred a new appreciation of the nationwide reach of the sole functional station, and Bordes vowed to make the most of the capacity after the deluge. Within a few months of the storm, Radio Docteur broadcasts commenced.

For pre-testing, ten-minute monologues—some 20 in all—were developed on four topics: prenatal care, the new mother, infant health, and family planning. All messages were broadcast uninterrupted in the waiting rooms of clinics. Gradually, feedback from the audience prompted the message designers at the Centre d'Hygiene Familiale to change their track. Taking into account the potential of radio and the lackluster nature of the monologue format, they broke the messages up into one-minute segments, switched over to the dialogue format, and expanded the range of topics addressed. In keeping with public sentiment, they also revamped

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family-planning messages so that the stress now falls on the health benefits of spacing births rather than on the more negative of cooling population pressures.

Twice a day, six days a week, Haitians can now tune in Radio Docteur on either Radio Lumiere or Radio Nationale in Creole, the local language. They have made household families of Fanny and Ti Jo, the two characters who keep the dialogue on health going my assuming a variety of paired roles: husband and wife, patient and doctor, or patient and nurse. A catchy theme song draws the listening audience in, and the listening fare changes according to the day of the week. Family-planning messages are featured on Mondays and Wednesdays, advice on maternal and child health is broadcast on Tuesdays, and national and international news can be expected on Thursdays. Fridays are given over to discussion of the symptoms of common ailments, and Saturdays to the prevention and treatment of these same ills.

Radio seemed a natural choice for getting out health information and doctors' recommendation in Haiti. While precise statistics on radio ownership are not to be had (estimates on the number of transistors in the country wary from 85,000 to 300,000) 900 of the nation's 1,500 rural schools have access to radios, and the sight of a Haitian with a transistor in hand is a commonplace.

RESULTS:

The national impact of Radio Docteur has never been evaluated. A survey of a village of 4,000 that had heard the broadcasts for eight years indicated that knowledge of the subjects covered in the programs had risen dramatically. However, no attempt was made in the conduct of this study to isolate the effects of health education efforts other than Radio Docteur on this population. Spot checks and other impressionistic evidence suggest that people have committed the messages to memory, but the relationship of health knowledge to health practices awaits study.

Another kind of measure of Radio Docteur's impact is the success of its in-school spin-off, Classe d'Hygiene. Aimed at 30,000 fifth and sixth-graders (most of them between the ages of ten and fifteen), Class d'Hygiene is an educational contest. The program is run from November to March each year. Participants listen to twelve lessons on health, each of which is broadcast thrice weekly in French (the language of classroom instruction in Haiti). Immediately after each broadcast, the students answer five questions in writing, receiving two points per correct answer. Prizes and certificates

are awarded both to outstanding participants and to their schools on the basis of end-of-term scores. Participation in this program has grown every year since its inception, with the number of written responses from fifth and sixth graders rising from 444 in 1970 to 20, 064 in 1975.

After 1975, Radio Docteur program was institutionalized through the Education Department in order to reach both the teachers and the pupils of Haiti's elementary schools.

OF NOTE:

- In conjunction with other educational activities, the Centre d'Hygiene produces print materials, films, slide-tape shows, and folk media performances. It also runs seminars and training courses for health workers.
- The sponsoring government agencies and the Centre d'Hygiene Familiale (a private organization) enjoy excellent relations. The Center develops, pre-tests, and finds effective ways to present the messages, which the government incorporates into its programs.
- Both Radio Lumiere and Radio Nationale are non-profit operations, and the Ministry of Health does not have to pay for broadcast time.
- Another project of Radio Lumiere, still in pilot stage, involves the attempt to use two-way radio to promote integrated rural development. The object is to encourage farmers, housewives, and youth to voice their complaints and opinions and to record their words on cassette tapes for replay.
- The present network of stations includes 16 affiliates, enough to insure nationwide coverage.

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Clearinghouse on Development Communication
January 1979

THE KAVAR VILLAGE PROJECT
IRAN

TARGET AUDIENCE:	16 rural villages in the area of Kavar
OBJECTIVES:	To provide adequate health services to the rural villages by training VHW's (village health workers)
MEDIA:	Print and interpersonal communication
DONORS/SPONOSRS:	Pajlavi University, International Development Research Centre of Canada (IDRC)
DURATION:	February 1973 to January 1976
CONTACTS:	Dr Hossain A Ronaghy, Chairman, Department of Community Medicine, Pahlavi University School of Medicine, Saadi Hospital, Shiraz, Iran; Dr. Steven Solter, Department of Community Medicine, Pahlavi University School of Medicine, Shiraz, Iran

DESCRIPTION:

The Kavar Village Project was one of two pilot projects launched in response to an increasing shortage of trained health personnel and the problem of limited access to modern health services in Iran's remote rural areas. The initial aim was to improve rural health in Iran by expanding the Health Corps system which, in 1973, provided health stations and mobile teams that covered 6,000 (roughly 12 percent) of Iran's 55,000 villages. The Health Corps system was expanded by training indigenous village health workers (VHWs).

The study began in January 1973 under the direction of the Department of Community Medicine (Pahliavi University School of Medicine) and the financial support from the International Development Research Centre of Canada (IDRC). A VHW-training site was chosen at Kavar, a small town about 35 miles southeast of Shiraz. Located in Kavar was a Health Corps station, of about 400 similar health centers found throughout rural Iran. Near Kavar, 16 isolated villages were selected; from each one a literate villager was chosen from a group of volunteers. The 11 male and 5 female VHW's represented a wide range of ages (16 to 45), personalities, and socioeconomic backgrounds. Their training consisted of classroom sessions, demonstrations, and clinical training. After completing

the course, they returned to their villages as paid health auxiliaries and took "refresher" courses from time to time.

Before the VHW's were selected and trained, baseline surveys were conducted to determine disease prevalence and the availability of literate villagers and medical care. The surveys showed that most of the complaints voiced at the village mobile clinic were fairly simple and that an auxiliary health worker was capable of adequately treating most of the cases and referring the remaining 10 percent to the medical center. In addition, a random-sample knowledge, attitudes, and practices (KAP) study of individual and public village health was conducted in 200 households. Census data on births, deaths, marriages, divorces, immigrants, and total population were also gathered to use as a basis for developing a behavioral objectives to be met by the VHW's: communicable disease control; environmental health; nutrition; community education; maternal and child health and family planning; and treatment. These behavioral objectives then provided the basis for curriculum planning and for the content of the Persian learning materials to be prepared for the course. The subjects covered included growth and development, anatomy and physiology, nutrition, communicable diseases, VHW-patient relationships, maternal and child health and family planning, and rural public health.

An intensive six-month training course began in August 1973 after the VHWs had assembled in Kavar. The major objective of the course was to prepare the VHW's for preventive medical and educational work in their respective villages. Staff members from the Department of Community Medicine, medical personnel from the Health Corps, and the project training director taught the courses, integrating theory and practice by giving the students the daily opportunity to apply in the field or in the clinic what they had learned in the classroom. Classes were taught in the rented house that also served as living quarters for the VHW's, while practical and clinical work was done at the nearby Health Corps station.

VHW trainees were divided into four groups headed by a midwife attached to the Health Corps clinic, a Health Corps aide in the treatment room, a Health Corps station assistant trained in pharmacology, and a Health Corps physician. Each group dealt with one of the major areas: maternal and child health and family planning, treatment, including sterilization techniques, methods of giving injections, wound dressing and other first aid skills; indications, contraindications, dosage and side effects of drugs; and history-taking, physical examination, and patient evaluation. Rotating on a weekly basis, all students acquired experience in all four areas. They

devoted the final three months of training to clinical skills. The VHW's were taught ways to assess the main rural clinical problems and to establish whether a patient should be treated in the village or referred to a physician in Kavar Shiraz. In addition to seeing and treating patients at the Health Corps station, the VHW's made numerous field visits to nearby villages.

RESULTS:

Trainees' skills and knowledge were evaluated periodically through out their six months through written examinations and observations. A committee of physicians observed VHW trainees in clinical and field settings and evaluated their competence in each area of work.

Evaluation studies indicate that the VHW's are well accepted by the people and that they are influencing the health practices of the villagers. During the VHW's first six months in the field, patient visits to the clinic facilities numbered 4,875 out of 9,152, and the percentage of females between the ages of 15 and 44 who were using family-planning methods increased from 8.8 to 21.4.

In addition, the VHWs's have been able to motivate the villagers to make much needed sanitation improvements, including construction of sanitary toilets and improvement of existing ones, separation of animal quarters from human living quarters, development of clean water sources (pumps and wells), and improvement of existing bathhouses or construction of new ones where needed.

OF NOTE:

- A large part of Iran's medical establishment was powerfully opposed to, or at least critical of, the scheme. It argued that the lives and health of people would be jeopardized by putting them in the hands of "half-doctors" and semi-skilled health workers.
- The village social structure caused some problems. For example, the VHW's who had the greatest difficulty finding acceptance were those who were well known to the village and known to belong to factions or families identified with certain values. Social custom and pressure also inhibited the recruitment of women.
- Apparently, the experience of serving in villages and small towns afforded by organizations such as the Health Corps is not inducing doctors to remain in outlying areas. Health Corps doctors tend, rather, to

return to large urban centers as soon as their term of service is over.

- Another pilot program launched at the same time as the Kavar Village Project was the Middle Level Health Workers Project in Marvdasht. The middle level health worker (behdar) has from 9 to 11 years of education and trained for four years. A three-tiered system is therefore envisaged, with the behdar serving as the link between the VHW and the physician or hospital.

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Clearinghouse on Development Communication
April 1979

ZAA NA UWATUNZE
KENYA

TARGET AUDIENCE:	Kenyans within the national radio-broadcast sphere
OBJECTIVES:	To mix entertainment and education in an effort to spread vital messages on health, particularly on that of mothers and infants
MEDIA:	Radio
DONORS/SPONOSRS:	UNICEF, The United Nations Fund for Population Activities, the Voice of Kenya, and the Kenyan Ministry of Health
DURATION:	Begun in February of 1975; pilot phase concluded in mid-1976; ongoing under the auspices of the Government of Kenya since 1976
CONTACTS:	Professor G.S. Eshiwani, Director, Bureau of Education Research, Kenyatta University College, Box 43844, Nairobi, Kenya; Mrk Haris, UNICEF, Communications and Information Office for East Africa, P.O. Box 44145, Nairobi, Kenya

DESCRIPTION:

In 1975, UNICEF, the United Nations Fund for Population Activities, and the Voice of Kenya agreed to co-produce entertaining health-education programs for open broadcast. The series that grew out of the collaboration, Zaa Na Uwatunze (Giving Birth and Caring for Your Children), features nationally-known entertainers in an episodic situation comedy. The upbeat presentation cover down-to-earth subjects—the nutritional value of eggs, the dangers of entrusting infants to the care of young siblings, and the need for inoculation, etc.—and give listeners a chance to identify with both the situations and the characters.

Like all "soap opera" regulars, the characters in Zaa Na Uwatunze are stereotypes, and their predictability is redeemed by their exaggerated flair. The role of Mzee Pembe is that of sop. He is hidebound, given to drink, and blissfully ignorant of many of the needs and problems of his 16 children. Mama Njeri, the protagonist, is Mzee Pembe's opposite and his mate. Her children's welfare claim her nearly complete attention, and she must "educate" her stubbornly

conservative husband besides. Her dramatic task is to convince him episode-by-episode and change-by-change that it is in the family's interest to embrace some new ways and to let some traditions lapse. She is aided in this domestic struggle by a series of third parties, all of them played by a single versatile actor.

Zaa Na Uwatunze (popularly known as the Kiroboto show) is broadcast in Swahili, Kenya's official language, once a week. Broadcasts last only 15 minutes each, but they command prime-time programming slots, (on Sunday afternoons, and occasionally on Saturday nights). No scripts are used to produce the program, although health educators and a U.N. consultant work closely with the actors, and the budget is shoestring by almost any standard. An ingredient that compensates for the lack of high-priced production techniques is spontaneity. The radio shows are recorded in studios packed with fans, so the actors play to the audience and use instant feedback to strengthen their performances.

An experiment is open broadcasting (which, by definition, aims to hold a mass audience that has no particular commitment to the subject matter or to self-educate), Zaa Na Uwatunze has been linked to non-formal education activities for adults. Its episodic structure, characters, and allusions to themes treated in previous broadcasts seem to provide listeners with some sense of continuity and progress. Moreover, the program reiterates the themes being taken up by health educators and field-workers, some of whom act as consultants to the production staff.

RESULTS:

The impact of the Zaa Na Uwatunze broadcasts has been calculated primarily in terms of the size of the listening audience, listeners' recall of health information, and their familiarity with the characters. No attempt has been made to study the effects on health practices of the knowledge gains and attitude changes brought about by the program.

Evaluative information has been garnered from four sources: the studio audience, fan mail, a questionnaire administered at the end of Zaa Na Uwatunze's first broadcast year, and two panels of government officials involved in rural education development. Interestingly, the judgments of the panels of experts clashed with the evidence culled from the other sources, some experts insisting that the program taking on a more serious tone and the audience claiming to like the blend of message and madness.

One finding of the 510-person survey conducted in December of 1975 may explain this difference of opinion: highly educated Kenyans appeared at least responsive to the programs, ostensibly became the information embedded in the comedy is not "news" to them. Other findings of the survey include the fact that 92 percent of those responding to the questionnaire know of the program, the discovery that listening time was s great among those for whom Swahili is a second language as for those for whom it is the native tongue, the fact that radio ownership correlates directly with listenership, and the revelation that the programs seem to hold roughly equal appeal to all age groups (25 years of age and under, 26 to 50 years, and over 50 years). Given the nature of this broadcast experiment, the single most important conclusion from early evaluations may be that somewhat over a third of the listening audience claimed to listen to the program primarily because it is funny, while over half said they tuned in because they felt that they learned something from the humorous shows.

OF NOTE:

- The characters in Zaa Na Uwatunze don't stand on ceremony. In one episode, the beleaguered wife threatens to sell herself if her husband continues to sell the family's much-needed eggs to buy beer.
- Fan mail for Mzee, Mama, and the stock characters has been received from listeners in Several East African countries besides Kenya.
- The radio scripts are based on the standby formula from advertising. The object is to contrive a situation in which the audience identifies with the "straight man" who espouses sound ideas and laughs at the fool who upholds convention for its own sake.
- The Zaa Na Uwatunze series has been replicated in both Tanzania and Zambia, apparently with success.
- Some Zaa Na Uwatunze broadcasts were taped for use in cassette-listening forums sponsored by the U.N. Food and Agriculture Organization in conjunction with the Programs for Better Family Living under way in Kenya. Cassette recordings of the series are also being used in-school home economics classes and in training programs for field-workers.
- A short film on Zaa Na Uwatunze's production techniques may be made by UNICEF for promoting the use of entertaining radio broadcasts in support of development projects.

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Clearinghouse on Development Communication
October 1978

HEALTH EDUCATION RADIO DRAMAS
SRI LANKA

TARGET AUDIENCE:	Sinhala- and Tamil-speaking adult population of Sri Lanka
OBJECTIVES:	To use a mass media entertainment format to convey health and family-planning information
MEDIA:	Radio and postcards
DONORS/SPONOSRS:	Ministry of Health, Ministry of Information and Broadcasting, Government of Sri Lanka; United Nations Fund for Population Activities; United Nations Children's Fund
DURATION:	Begun 1973; ended 1977
CONTACTS:	Piyasoma Medis, Sri Lanka Foundation Institute, 100 Independence Square, Colombo 7, Sri Lanka; Program Officer, UNICEF, P.O. Box 143, Colombo, Sri Lanka

DESCRIPTION:

The Government of Sri Lanka and UNFPA developed and implemented a $6 million multifaceted family-planning project in 1973. Eleven interrelated programs, including secondary school education, medical education, health delivery, health education, worker education, and mass communication were funded to encourage family planning. Under the mass communication component, two radio drama series were developed. Radio was selected as the medium because 72 percent of the total population had access to radio. Drama was chosen as the method because it was second only to music in listening popularity.

In late 1973, UNICEF and the Sri Lanka Broadcasting Corporation (SLBC) negotiated an agreement whereby SLBC would produce and broadcast the two radio dramas, one in the official Sinhala language, spoken by 72 percent of the population, the other in Tamil, spoken by 20.5 percent of the population. In return, UNICEF would provide SLBC with $13,000 worth of production equipment. UNICEF and the Ministry of Health would be responsible for the family-planning information that would be woven into the series' story lines.

The Sinhala story focused on a family with 14 children. The problems associated with a large family were compared to those of a neighboring family with only four children, with the story line emphasizing the benefit to the children in the small family. The Tamil story dealt with a family with four children and an unemployed father. After encountering a series of problems associated with the burden of supporting the household, the father becomes aware of the importance of family planning.

Programs in both series were broadcast once a week from July 1974 to July 1975, the official project period. A committee of representatives of the Ministry of Health, the Ministry of Information and Broadcasting, and UNICEF was then formed to develop a format for program expansion. The committee considered family planning an aspect of family health and therefore felt that the scripts should be broadened to include other health messages. Health questions would be asked at the end of each program to solicit postcard replies, a technique that was feasible because of Sri Lanka's high literacy rate of 78 percent. With this feedback, reaction to program messages could be evaluated. The two new series began in March 1976 and were broadcast once a week through December 1976.

The new Sinhala drama series, Pahan Siluwa, retained the original story line. The educational content was expanded to include child health, hygiene, and nutrition. Kari Kanda Theivam, the Tamil series, adopted a new story line because the original had reached a logical conclusion. The Tamil story centered on a doctor and his family living in a rural village near a tea estate. In this setting, health questions pertaining to poor estate families, who are primarily Tamil speaking, could be addressed. The story characters presented health information in clever and humorous scripts. Religious themes and lively music were integral parts of both series.

RESULTS:

To evaluate the effectiveness and appropriateness of these series, random samples were taken from those who had sent postcard replies. This sample population was sent a questionnaire and a self-addressed stamped return envelope. Again, the self-administered questionnaire could be used because of Sri Lanka's high literacy rate. These were 30 multiple choice questions, which examined the sample's demographics, media usage, and specific knowledge of health information. The questionnaire did not try to find out if the health information was being used. That is, the questionnaire

was to find out if the respondents understood and could recall health messages, but not if they had adopted good health practices. The assumption (viable or not) was that the recall of specific health messages indicated strong adoption.

Although the questionnaires were sent to a large sample, (1,100 Sinhala and 300 Tamil), the sample biased in that it was drawn from listeners who had previously sent in postcards. This meant that only the positively predisposed and literate listeners would participate in the evaluation. However, with limited time and money, the evaluators elected to concentrate their analysis on these known listeners. The rate of response to the questionnaires was excellent for both series. Eight hundred Sinhala questionnaires (73 percent) and 180 Tamil questionnaires (60 percent) were returned.

The following is a summary of the findings: 1) the respondents were primarily female, unmarried, unemployed, and below 30 years of age, with some secondary education; 2) 88 percent listened to the radio between 5 p.m. and 11 p.m.; 3) the majority preferred entertainment programs, but a substantial minority (39 percent) indicated a preference of educational programs; 4) identification of air time and main characters demonstrated a strong alliance to the series, but few respondents had heard all of the programs in the series; 5) the respondents said the health information was new and valuable to them; and 59 percent of the Sinhala series listeners could recall some health messages, while 100 percent of the Tamil series could recall health messages.

OF NOTE:

- From 33 to 50 percent of mothers attending health clinics in randomly selected areas listened to the programs and could mention some of health messages conveyed.
- Ninety-five percent of the postcards sent in response to the health question at the end of each program were correct answers.
- Pahan Siluwa, the Sinhala series, continued broadcasting under private sponsorship excluding the health messages from the script.
- Approximately 26,000 postcards were received during the series' broadcast. As many as 1,000 were received in one day.

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Clearinghouse on Development Communication
Aril 1980

MAN IS HEALTH (MTU NI AFYA)
TANZANIA

TARGET AUDIENCE:	Approximately one million adult villagers
OBJECTIVES:	To provide villagers with basic information on disease, disease control, and the relationship between environment and health
MEDIA:	Radio, cassette records, printed materials, interpersonal communication, flipcharts, and posters
DONORS/SPONOSRS:	The Government of Tanzania with support from the Swedish International Development Authority
DURATION:	Conceived in 1971; developed in 1972; carried out in 1973
CONTACTS:	Director, Institute of Adult Education, P.O. Box 20679, Dar es Salaam, Tanzania; Budd L. Hall, International Council for Adult Education, 29 Prince Arthur, Toronto, Canada M5R 1B2

DESCRIPTION:

The Man is Health project took root in late 1971 as a large-scale campaign aimed primarily at educating villagers on the symptoms, prevalence, and origins of five potentially controllable widespread diseases. The secondary objective of the project's designers was to provide the newly literate with an opportunity to practice their language skills. Under the combined auspices of the Tanzanian Ministries of Health, Education, and Rural Development, the campaign represented an attempt at integrated development.

The project was backed and set in motion by Tanzanian's role political party (The Tanzanian African National Union (TANU)), The Institute of Adult Education, a half dozen government agencies, and Radio Tanzania. Officials at all levels were versed in the project's importance and facets; industry was called upon to manufacture clothing stamped with the project's logo; and broadcasters and journalists were charged with keeping the public informed of all campaign-related activities and ideas.

Some 18 months of planning, organizing, and training culminated in May 1973 with a surge of educational

community-development activities. Each week for 12 weeks each study group of from 15 to 60 met informally with a trained discussion leader to hear radio broadcasts and to discuss simple supplementary texts provided by the government. From these discussions of health and sanitation sprang community work projects conceived and carried out by the study groups in their own villages.

RESULTS:

An estimated two million Tanzanian adults, twice the number of officials had hoped to reach, participated in the Man is Health project. Moreover, the overall attendance rate of those who attended from the beginning was 63 percent, an unparalleled achievement for a campaign of such breadth. A third indicator of success is also tangentially statistical: so pervasive was the health campaign's impact that project evaluators had to reclassify some of their control groups as experimental groups.

The campaign had its critics. Some felt that it failed to integrate existing health services into its "curriculum." Some complained of tie-ups in the distribution of the text materials. Others felt that the training activities were too sketchy. · Nevertheless, concrete evidence of the campaign's effects on the quality of village life is everywhere. In particular, hundreds of thousands of latrines were built by those who heard the radio programs, sales of mosquito netting jumped sharply in some areas, and coastal townspeople filled many of the swamp holes in which disease-carrying insects breed after heavy rains.

OF NOTE:

- Each study group left at least one "monument" to the Man Is Health campaign. Typical projects involved digging wells or clearing living areas of insect-infested vegetation.
- Some study groups continued to meet months after the health campaign ended.
- Reliance upon cell leaders in several districts reinforced the ten-house cell system as a means of stimulating participation in development.
- The text and the study guides were printed on newspaper presses. A million copies were distributed, many of which were shared.
- Some study group reportedly diagnosed diseases that afflicted group members and sent the victims to nearby hospitals, where the diagnoses were confirmed and the patients treated.

- The network of study group leaders established in the health campaign was reactivated for the national nutrition campaign, Food Is Life, that begun in June of 1975.

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Clearinghouse on Development Communication
June 1977

TELEMEDICINE IN ALASKA U.S.A.

TARGET AUDIENCE:	Eskimo, Indian and Aleut villagers
OBJECTIVES:	To improve access to and the quality of health care in rural Alaska
MEDIA:	ATS-1—two way satellite radio, ATS-6—satellite-TV, videotape, computerized health records
DONORS/SPONOSRS:	U.S. Department of Health, Education, and Welfare (the Indian Health Service, the Lister Hill National Center for Biomedical Communication); U.S. National Aeronautics and Space Administration
DURATION:	ATS-1 began in 1971 and will continue until replaced by another system (tentatively, in late 1977); ATS-6 began in 1974 and ended on year later
CONTACTS:	Dr. Dennis Foote, Assistant Professor, Institute for Communication Research, Stanford University, Stanford, CA 94305, USA

DESCRIPTION:

Experiments in the use of telemedicine in Alaska began under the auspices of the Indian Health Service (the aim of the U.S. Public Health Service responsible for providing health care to native Alaskans). Faced with the problem of servicing scattered small villages in remote regions and thwarted by the lack of reliable communication channels in the bush, the agency turned to telemedicine in the hope that consultation on a regular basis would improve village health services.

Telemedicine became a part of the daily life of 17 villages in Tanana region when the National Aeronautics and Space Administration, IHS's partner in the Telemedicine experiments, made the Applications Technology Satellite-1 (ATS-1) available in 1971. The ATS-1, still operating as of 1977, is a voice-only communication medium supported by simple and inexpensive ground equipment: modified taxicab radios and ten-foot diameter antennas of metal mesh. By providing reliable communication channels between villages and the district hospital, the ATS-1 functions as a medical support system; it enables village health aids

to provide health-care services under a doctor's supervision and helps evacuation planes to reach patients in critical condition swiftly.

The villages health aides trained as part of the telemedicine experiments are nominated by their communities and receive up to 16 weeks of training conducted by the Public Health Service both in the field hospital and on the job. Each aide leaves the intensive course equipped with a drug kit, a diagnostic reference manual, instruments, and new knowledge. In the village, the aide turns on the radio at a scheduled time each day to receive a "doctor call" form the regional hospital. During the radio consultation, the aide reports symptoms, answers the doctor's request for more information, receives professional advice, and helps the consulting doctor determine whether the patients in question need to be evacuated.

While the health aides remain the mainstay of telemedicine in Alaska, they played only a minor role in a one-year experiment carried out in 1974-75. The ATS-6 experiment, which relied upon the use of a much more sophisticated and powerful satellite than the ATS-1, added a video component to telemedicine that enabled doctors to diagnose difficult cases by using TV. The experiment, in which two well-equipped clinics in fairly large villages were linked to a field hospital and a referral hospital—was run while a problem-oriented computerized medical record system (Health Information System) was being established in Alaska. Up-to-date records of patients were collected at a central point, put into the computer, and made available at all sites; the computer also enabled itinerant nurses to identify villagers who needed PAP smears, inoculations, eye and ear examinations, etc.

RESULTS:

Since the introduction f the ATS-1, the capacity of existing health facilities to handle emergency cases, solve administration problems, and answer requests has increased, and service has improved. In addition, villagers demonstrate an increased willingness both to seek medical advice and to follow prescribed treatments. More patients now receive the benefit of a doctor's advice and more are treated for diagnosed ailments than ever before. Moreover, the number of contacts between doctors and health aides increased by 400 percent during the first year of the experiment.

In general, it has been difficult to show a connection between changes in aggregate morbidity, mortality, and hospitalization statistics on the one hand and the

improvements in communication on the other. However, most evaluations of the ATS-1 experiments have been positive; and partly as a result of these evaluations, the State of Alaska and the Public Health Service are now implementing a satellite system through a commercial long distance telephone carrier.

The ATS-6 experiment was also deemed worthwhile by the health-care providers who took part in it. But while participants claim that the video component of telemedicine enabled them to expand and improve health service somewhat, many doubted that the improvements made possible by the video link were worth the expense and the inconvenience. In contrast, these same people approved unanimously of the problem-oriented computerized system of record-keeping that was developed in conjunction with the experiment, and the IHS plans to introduce the system statewide.

OF NOTE:

- Some aides invite their patients to listen to the long-distance consultation.
- Doctors in remote locations were offered the chance to participate in a series of round-table discussions via satellite, but the program fizzled because IHS doctors in Alaska have such demanding caseloads that they couldn't follow a rigid time schedule. However, a course on cardiac care was offered to nurses at regional hospitals via the satellite and was well received.
- Most health aides are village women with at least a fair command of English.
- Since the community recruits its own health aide, acceptance of the program tends to be high, and staff turnover kept at a minimum.
- Besides appreciating its medical function, villages value the radio system as a means of keeping in touch with other villages, particularly with friends and relatives who are hospitalized.
- When asked if they had learned anything in particular from listening in on the consultations, six of the nine health aides in villages with satellite link-ups mentioned specific health facts. None of their counterparts in the control villages could recall specific information related to cases.

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Clearinghouse on Development Communication
October 1977

THE COMILLA PROJECT
BANGLADESH

TARGET AUDIENCE:	Rural people in the administrative unit of Comilla (approximately 200,000 people)
OBJECTIVES:	To use nonformal education, surplus labor, and technical innovations to raise agricultural productivity and to promote voluntary community development activities
MEDIA:	Audio-visual aids, demonstrations, print, slide and audio tapes, folk media, and interpersonal communication
DONORS/SPONOSRS:	Academy for Rural Development (Bangladesh), the Ford Foundation, and the International Cooperation on Administration (now the U.S. Agency for International Development)
DURATION:	Started in 1959; ongoing
CONTACTS:	Khandaker Asduzzaman, Director, Academy for Rural Development, Kotbari, Comilla, Bangladesh

DESCRIPTION:

A prototypical development effort, the Comilla Project has weathered a civil war, bureaucratic upheavals, and the better part of two decades. It was designed by the national government's Academy for Rural Development as a development laboratory in the most adverse socioeconomic conditions. In the roughly 100 square miles of the Comilla Thana (jurisdiction), average farm size, annual income, literacy rates, and life expectancy rates were among the world's lowest when the project began. Infant mortality rates and population density, on the other hand, were spectacularly high.

No master plan guided the Comilla Project's planners. The Academy staff members, assisted by advisory teams from Michigan State University and the Ford Foundation instead began with the theories and research finding of social scientists and an intimate knowledge of the customs, business methods, and agricultural practices prevailing (1) to base the project on sound economic principles likely to promote increased production and family income; (2) to develop a new institutional framework whose keystone is two-way flow of ideas and information between the village and the

project offices; (3) to focus project activities on immediate problems without losing sight of long-term concerns; (4) to encourage the formation of disciplined groups of citizens who band together voluntarily in order to pool their resources, make decisions affecting group welfare, and discover new ideas and practices; and (5) to involve all project officials as teachers and guides rather than as supervisors.

A four-part project was developed to serve the five key objectives. The first component is a federation of agricultural cooperatives—each of which consists of 30 to 60 members and includes a chairperson, a manager, and a model farmer. Parallel to this federation is one composed of co-ops of artisans and laborers. Both the agricultural co-ops and the Special Cooperative Societies fall under the purview of Thana Central Cooperative Association, whose members are representatives of the constituent organizations. The second component is the Thana Training and Development Center, a sort of campus at which project activities are coordinated and integrated, information is distributed, and classes and demonstrations are held. The third component comprises the women's program and other special activities aimed at helping passed-over groups increase their earning power and better their health. The fourth component, rural works, entails irrigation, electrification, and building projects.

The emphasis in the non-formal education activities is on solving basic problems related to agriculture, employment, health, nutrition, and family planning. Little distinction is made between educational and business activities, weekly meetings serve in lieu of formal classes, and the use of the mass media is foregone in favor of more intimate training devices.

RESULTS:

By 1978, the Comilla Project had 15, 000 members in 420 agricultural cooperatives. The agricultural cooperatives had brought roughly 16, 000 acres of land under plow by installing 286 irrigation pumps and tube wells and had adopted higher yielding varieties of crops. One report shows that about 95 percent of the land in the Comilla Thana was being cultivated by farmers who had embraced at least one of the practices being endorsed to increase production. Somewhat contradictorily, a survey conducted in the early 1970's by the Academy showed that non-formal education activities, while perhaps cost-effective, had not deeply affected more than 10 percent of the area's rice cultivators. The impact of such educational activities on other target groups was not systematically evaluated.

Bureaucratic infighting in the aftermath of Bangladesh's war of independence in 1971 impeded project expansion, but probably the most significant result of the Comilla Project is its widespread replication under the Integrated Rural Development Program. A nationwide program modeled after the Comilla Project was adopted in 1972 as part of Bangladesh's first five-year plan. The expanded program, however, reportedly suffers from the neglect of education activities, poor management, and a lack of both funds and materials.

Current emphases in the program fall upon local institution-building and the improvement of the physical infrastructure, dual priorities that Bangladesh planners associate with China's successful rural development program. According to one development analyst, the most serious handicaps to realizing the goals embodied in these priorities are (1) a lack of integration of efforts to build roads, irrigation systems, councils, and cooperative and (2) the counterproductive rivalry of proponents of various development approaches.

OF NOTE:

- Non-formal education activities within the Comilla Project have accounted for only a small portion (estimated at 15 percent) of the project's total costs.
- Imams (Moslem prayer leaders) were given teaching roles in this project, an assignment that both made use of local talent and disarmed potential resistance from the conservative Imams themselves. The Ministry of Education, however, disapproved of this move.
- Some of the rural elite has take charge of local non-formal education groups only to use classes as a cover for exploitive business dealings.
- U.S. grants under PL480 were used to erect some of the buildings and other facilities used by the Thana Training and Development Center in the 1960's. But since then, Government of Bangladesh has been providing the facilities.
- Academy-level personnel (U.S. trained professionals) at first resisted taking on grassroots responsibilities and duties not usually shouldered by the professional class in Bangladesh. But most now admit that fieldwork and frequent contact with the villagers help keep program objectives and activities realistic. The Academy's faculty is now intimately involved with project development and non-formal education.
- Village singing groups infuse performances of traditional songs in local markets and villages with messages on agriculture, family planning, and Academy projects.

- One analysis of why the success of the Comilla Project has been difficult to duplicate focuses on four essential but scarce ingredients: charismatic leadership, virtual bureaucratic authority, the (albeit guarded) willingness of academics to maintain direct contact with the project's beneficiaries, and openness to various development models.

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Clearinghouse on Development Communication
July 1978

LAEDZA BATANANI
BOTSWANA

TARGET AUDIENCE:	Villagers in the northeastern section of Botswana's Central District
OBJECTIVES:	To encourage community participation in development efforts, to identify villagers' perceptions of their own problems, and to generate support for government-sponsored projects
MEDIA:	Popular theater: drama, puppetry, dancing, singing, drum-beat poetry
DONORS/SPONSORS:	Tutume Community College, Division of Extra-Mural Services; Tutume Sub-District Extension Team; Botswana Extension College
DURATION:	Initiated in 1974; ongoing
CONTACTS:	Ross Kidd, International Council for Adult Education, 29 Prince Arthur Avenue, Toronto, Canada, M5R 1B2; Martin Byram, NFE Materials Development Specialist, University College of Swaziland, Private Bag, Kwaluseni, Swaziland; Frank Youngman, IAE/UCB, Private Bag 0022, Gaborone, Botswana; Jeppe Kelepile, Coordinator, Cultural Development Project, Institute of Adult Education, P.O. Box 226, Francistown, Botswana

DESCRIPTION:

Laedza Batananik (which means "the Sun is already up, so come and work together") is an awareness-raising project begun in 1974 to motivate people to help themselves and to take full advantage of government-sponsored development opportunities. Put together by local leaders and government extension workers, the "community awakening" campaign takes the form of an annual series of village festivals.

The project began as an experiment in the use of popular theater by government extension workers and still retains an empirical flavor. At the time of its inception, the community involved was plagued by apathy—a direct product of its scattered settlement patter, its neglect by men employed outside the area, and weak leadership form traditional authorities. Thus, when leaders at a village development conference

responded in a lively way to dramatized case studies and recommended a follow-up program in the villages, the organizers decided to respond with a mobile campaign using drama and other media. The first festival was highly successful, and participants demanded that it become an annual event.

Each festival is run as an integrated non-formal education project involving every extension worker in the area either as a local organizer or as a member of the mobile team of actor-animateurs. Each campaign also constitutes a community-organized effort: community representatives attend a pre-campaign planning workshop (in which priority issues are identified), provide back-up support for the festival, and participate in festival performance.

Each year the campaign team tours the area's five major villages and puts on a 90-minute performance of drama, puppetry, dancing, singing, and drum-beat poetry in each. After every performance, the actors and local extension workers divide the audience into groups to discuss the problems presented. A recent innovation is a post campaign program of practical-demonstrations and other activities (e.g., seed distribution) to help people move from discussion to action.

The major medium used in each festival is "rough" or "popular" drama, which relies on improvisation rather than on a fixed script and depends upon the actors' close familiarity with the issues rather than upon rehearsals. Words are kept to a minimum and the narrative is repeated continually for the benefit of latecomers. Knock-about action is used to hold people's interest and audience participation is emphasized. Other media (puppetry, singing, dancing, poetry) are used to reinforce the messages communicated through the drama.

RESULTS:

Laedza Batanani attracts large number of people, many of whom have never before taken part in development programs. The festivals present local issues in a compelling fashion and give villagers the chance to vent their complaints in an informal but personal context. The performances also provide excellent entertainment and simulate local cultural activity.

Many positive changes have issued directly form Laedza Batanani: in particular, attendance at village development meetings has increased, the number of people infected with venereal disease who report their cases and show up for their injections has risen, and

more home gardens have been established. In addition, the success of the project has promoted three other districts in Botswana to take the same approach to running integrated rural education campaigns.

OF NOTE:

- The characters in the "problem plays" are named for their vices and have already become part of village lore.
- The use of traditional dancing and of drum-beat poetry as festival media has proven extremely popular and has demonstrated the potential of folk media and folk artists for communicating modern development messages.
- Using the popular theatre as a "mirror"—projecting everyday concerns through theatrical media so that community members can look at and discuss them collectively—has proven effective in Laedza Batanani.

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Clearinghouse on Development Communication
June 1977

BEST COPY AVAILABLE

ACCION CULTURAL POPULAR (ACPO)
COLOMBIA

TARGET AUDIENCE:	Colombian campesinos (small farmers)
OBJECTIVES:	To provide subsistence farmers with basic education
MEDIA:	Radio, printed materials, interpersonal communication (supported by slides and films)
DONORS/SPONSORS:	ACPO is virtually self-supporting; 7 percent of its income comes form government sources, other grants of money or technical assistance have been made by Interamerican Development Bank and AID
DURATION:	Founded in 1947; ongoing
CONTACTS:	Bernard A. Hernando, Accion Cultural Popular, Apdo Aereo 7170 K39 A. Np. 15-81, Bogota, Colombia

DESCRIPTION:

Accion Cultural Popular began in 1947 as the handiwork of a 25-year-old Catholic Cleric, Jose Joaquin Salcedo. An attempt to use radio to provide subsistence farmers with the knowledge critical to both personal and community development, ACPO first broadcast from a single radio station in Sutatenza.

What was once an experiment has become an institution. Accion Cultural Popular now airs basic education courses in literacy, numeracy, health, building, hygiene, economics, and personal development. It runs a training program to prepare its own staff of 900 for communication and development work; it sponsors a correspondence service, it publishes a weekly newspaper and operates a printing press; it offers short extension courses of immediate or local interest; it sells hundreds of thousands of books each year at cost to campesinos; it sends education and entertainment vans into the countryside to show films and pass out printed materials; and it develops new audiovisual aids and new curricula on an ongoing basis. At the moment, ACPO is also engaged in self-evaluation and a family –planning campaign it has dubbed "responsible parenthood."

The heart of ACPO, the radio school, embraces 22,000 study groups. The radio Sutatenza groups are organized by local campesinos who schedule meetings, keep records, direct discussion, and counsel other group members. Learning cells rely on six cost-free textbooks that stand as a permanent record of the broadcast messages. These simple texts help the students acquire basic language and computational skills and present practical development-related information.

RESULTS:

An in-house evaluation of ACPO conducted in 1976 showed that 23 percent of the campesinos interviewed in five representative communities participated in the radio school, that those reached by Radio Sutatenza prefer it to any other station and that the number of community improvements in many areas correlated to the number than certificates for doing so. A more comprehensive evaluation has been made by the Learning Systems Institute of Florida University.

The most telling indicators of ACPO's success are, however, its 30-year survival, its financial independence, and its growth. Radio Sutatenza now reaches 17, 000 campesinos who address between 75,000, and 80,000 letters and requests to the station each year. More than 11,000 community organizers have passed through the institutes and returned to their homes to combat poverty, disease, erosion, runaway population growth, poor sanitation, and illiteracy. Moreover, at least 15 other Spanish-speaking countries have modeled educational radio programs after the Colombian prototype.

OF NOTE:

- In rural Colombia, El Campesino's circulation (approximately 70,000) is greater that that of any other newspaper.
- El Campesino regularly features special pull-out supplements on family planning and education. These pull-outs can be hung as posters or folded up into booklets.
- Simple Campesino Library books for the newly literate cost the farmers about 13 U.S. cents each. Since 1963, well over a million titles—the most popular of which is called Mother and Child—have found their way into rural homes.
- The 20-member staff of ACPO's correspondence service answers roughly 200 letters a day. This service provides radio listeners with opportunities to ask questions about the broadcasts and to practice

their literacy skills. It also supplies those who run ACPO with invaluable feedback.

- ACPO supports itself by sharing its radio station, recording studio, and printing plant with commercial interests.

REFERENCES:

Family Planning Education in Action: Some Community-Centered Approaches," Judy El-Bushra and Susan Perl, International Extension College and International Planned Parenthood Federation, London, England, March 1976.

Communicacion, Educacion No Formal y Desarrollo Nacional: Las Radio Escuelas Colombianas," Juan Braun, Educacion Fundamental Integral, No.1, Bogota, Colombia, August 1976.

A Field Evaluation of a National Non-Formal Education System: ACPO," Robert M. Morgan, Liliana Muhlman and Paul Masoner, LSI, Floida State University, Tallahassee, Fla., 1979.

Clearinghouse on Development Communication
June 1977

RADIO MENSAJE
ECUADOR

TARGET AUDIENCE:	Rural Ecuadorian adults
OBJECTIVES:	To teach illiterate rural adults with educational radio programming devised by and for their peers
MEDIA:	Radio and cassette recorders
DONORS/SPONSORS:	University of Massachusetts Non-Formal Education Project with funds from the United States Agency for International Development
DURATION:	Ongoing (initiated in August of 1972)
CONTACTS:	Padre Isaias Barriga Naranjo, Director, Radio Mansaje, Tabacundo, Tabacundo-Pichincha, Ecuador, S.A.

DESCRIPTION:

Campesino-produced cassette programs were introduced into the broadcasts of a small regional station, Radio Mensaje, in late 1972 as an attempt to reach a high proportion of the estimated 44,000 illiterate adults in the vicinity of Tabacundo, Ecuador. The project was designed to win over a mass audience through open broadcasting and to make the listeners themselves the programmers and the broadcasters. Its immediate objectives were to see whether radio programming without sophisticated formats, educated accents, etc., would still interest audiences, and at the same time to broadcast community-generated content in the vernacular. Its long-range goals were (1) to heighten the listeners' feelings of self-worth, (2) to further community development, and (3) to upgrade the listeners' literacy and numeracy skills.

With a modest equipment grant from the University of Massachusetts, the project secured 40 audio cassette recorders and many tapes. This equipment was then parceled out and made familiar to the unpaid teaching assistants in the area's 40 radio school center. Each *auxiliare* now uses this equipment to record tapes that are aired on two half-hour programs each week.

The Mensaje Campesino (The Farmer's Message) broadcasts reflect the idea that farmers are so interested in hearing themselves on the radio that home-made programming ca attract a wide audience. While the

auxiliares take charge of recording the tapes and delivering them to the stations, the broadcasts are no longer even edited, much less put in a set format. The programs contain advice, poems, songs, scripture readings, dramatization of community problems, testimonials, reading and math lessons (broadcast in conjunction with a pre-existing radio-education program), and exhortations.

RESULTS:

A questionnaire administered in 1971, 1972 and again in 1973 showed that the number of *campesinos* content solely on "the help of God" in community-development matter shrank form 80 to 50 percent in one year in the Tabacundo area. During the same time, the number interested in working for those willing to experiment with production practices rose from 56 to 84 percent. Still, the questionnaire did not reveal any significant increase in self-esteem among the farmers. Observers, however, contend that important attitude changes have indeed taken place. Padre Isaias Barriga, the station director, believes that using the recorders has shown the *campesinos* that the "power of the word" is at their disposal and that both the goals and the satisfactions of country life are unique and worthwhile.

Progress toward meeting the project's other two goals is relatively easy to measure and has been quite marked. Correct responses on a community development questionnaire increased from 50 to 61.5 percent from 1972 to 1973. In particular, the number who taught that erosion was a "bad thing" jumped from 26 to 58 percent of those questioned. Similarly, the number who scored "high" (about 55) on the language and math test given yearly between 1971 and 1973 increased dramatically. Overall drop-out rates rose from 26 percent during the 1971-1972 school year to 45 percent during the next, but this problem probably reflects external factors (crop failures and subsequent migration in search of work—the latter facilitated by a new highway that cut "commuting time" to Quito in half).

OF NOTE:

- Left on their own after receiving half-hour briefings on how to operate the tape-recorders, the *auxiliares* quickly came to terms with the equipment and used it carefully and creatively.
- One participating rural group without its own tape recorder rented a car to take it to the radio station's studio so its members could give a "live performance."

- The highly technical remarks of one well-intending but out-of-touch agronomist were "translated" by a *campesino* into an easily comprehended style.
- One community taped the speech of a development-program official and kept the tape as a lasting record of his promises to the people.

REFERENCES:

Programming by the People: An Ecuadorian Experiment," James Hoxeng, Educational Broadcasting International, Vol. 10, No. 1, March 1977.

Tabacundo: Battery-Powered Dialog," James Hoxeng, Valerie Ickis, and Alberto Ochoa, Technical Notes on Non-Formal Education, Center for International Education, University of Massachusetts, Amherst, Massachusetts, 1976.

Clearinghouse on Development Communication
June 1977

AGRI-SERVICE ETHIOPIA
ETHIOPIA

TARGET AUDIENCE:	Rural Ethiopian families
OBJECTIVES:	To furnish farm families with useful information and new perspectives on home sciences, economics, and village technology
MEDIA:	Print, demonstrations, and interpersonal communication
DONORS/SPONSORS:	The MISEREOR Foundation (Germany); CIDA (Canada); Entraide el fraternite (Belgium); INADES; NOVIB (the Netherlands); Development and Peace (Canada); and various private donors
DURATION:	Established in 1969; ongoing
CONTACTS:	Telahoun Haile, Director, Agri-Sercie Ethiopia, P.O. Box 2450, Addis Adaba, Ethiopia

DESCRIPTION:

The Agri-Service Ethiopia (ASE) correspondence course program was designed in 1969. Private, non-sectarian, and non-profit-making, ASE bases its philosophy and teaching methods on those developed at INADES. It exists primarily to serve the information needs of rural people and to further the development goals that traditional Ethiopian mutual-help organizations work to realize. It's main goals are to conduct research and educational experiments, to disseminate its course materials throughout Ethiopia, to make the most of its own managerial and other resources, and to integrate its work with that being done by other education and development agencies. ASE's courses cover most aspects of personal community development: home sciences, agriculture, gardening, hygiene, socio-economics, and topics of strictly local interest.

The first year of the project was devoted primarily to the preparation of courses on agriculture and hygiene. Between 1970 and 1972, classes got underway, the first and second year agriculture curricula were revised, and the introductory economics courses were developed. In practice, preliminary activities included translating and adapting materials shared by INADES, talking with farmers and incorporating their ideas and vocabulary into the texts being developed, correcting the texts, and making contact with farmers interested in participating in

pilot or first-year programs. The production of serialized booklets and the *gazzettas* (supplementary materials in newspaper format) used as companions to the booklets required most of the staff's resources.

In 1973, ASE began to expand the scope of its activities to embrace development activities other than education. Its first efforts included working with the Ministry of Community Development on a water-supply project financed by MISEREOR in the Bombe district, contributing services to an agriculture and training center in Wadja (that has since closed down), and cooperating with a textbook-production project sponsored by the Ministry of Education. In 1974, ASE organized its first seminar for group leaders, having sent 11 ASE leaders to a WADU (Wolayta Agricultural Development Unit) development seminar the previous year.

ASE underwent major changes in 1976. It moved its headquarters from Wolayta Soddo to Addis Ababa in order to cooperate more effectively with other agencies with similar interests. It also completed an extensive self-evaluation and decided to fortify its ties with farmers and peasant organizations. As of 1977, ASE has plans to construct a new office building in Addis Ababa, set up an offset printing press with French aid, assess the education needs of the farmers in peasant organizations, establish formal links to the Ministry of Agriculture, and study the feasibility of translating its "Introduction to Development" course into English for use in anglophone East African countries.

RESULTS:

ASE's initial self-assessment, carried out after one year of operating, revealed that in the area reached by ASE programs, more home gardens were being cultivated. In addition, more questions were being asked about long-honored traditions, interest in using scientific methods to solve social and economic problems had grown, more farm work tended to be done on schedule, and family cooperation appeared stronger than usual. At the same time, the staff identified its worst problem as a high drop-out rate among subscribers, a lack of funds, and a lack of transportation.

More quantitative evaluations conducted after the preliminary stock-taking showed that registrations increased from 213 in 1970 to 2,392 in 1976. (ASE estimates that non-literate farmers who attend the study groups outnumber registrants by three to one.) One survey of 151 farmers found that 100 percent of the subscribers to the agriculture course hoped to pursue their studies, that 87 percent of all participants felt that

the study groups were beneficial, and that 76 percent of the subscribers had tried out the methods they had studied. Another survey found, however, that the hygiene course had not significantly influenced the housekeeping of the participants.

Records for 1976 are more detailed than those for preceding years. Statistics show that 6,000 worksheets were received and answered by the ASE center, that five-sixths of all subscribers enrolled in the agriculture courses, and that ASE is at least temporarily solvent.

OF NOTE:

- By trial and error, ASE has found that its subscribers prefer illustrations to photographs and that the students respond more favorably than had been expected to the use of diagrams in the booklets.
- ASE has published two research papers—one on its own study of socio-economic factors in southwester Ethiopia and another on rural markets and prices in the Wolayta district—and will soon put out a bibliography of recent socio-economic publications or rural Ethiopia.
- In conjunction with its home sciences and women's education courses, ASE develops materials for use by nonliterates. In particular, a picture album on the education of children in being devised, and "circular letters" written and read aloud to groups by ASE home agents have been widely and successfully used.
- The agricultural section's new series on village technology will include booklets on tanning; animal slaughter, bee-keeping, forest conservation, fibrous plants, tobacco growing, compost-making and soil biology.
- ASE hopes to receive aid from the Ethiopian Government in 1978, though no promises or agreements have been made.

REFERENCES:

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Clearinghouse on Development Communication
October 1977

INTEGRATED FAMILY LIFE EDUCATION PROJECT
ETHIOPIA

TARGET AUDIENCE:	Ethiopian adults in four areas (approximately 360 people in the pilot project and 500 in the second cycle)
OBJECTIVES:	To identify the educational and developmental needs of rural Ethiopians and to create cooperative, replicable, and self-sustaining programs to meet those needs
MEDIA:	Print, film, posters and charts bearing enlarged photographs, interpersonal communication
DONORS/SPONSORS:	Ethiopian Women's Association and various Ethiopian government ministries, with financial support from the Africa Bureau of the U.S. Agency for International Development and technical assistance from World Education
DURATION:	Pilot project begun in 1973; second two-year cycle ongoing through December 1977
CONTACTS:	Zwedie Abeqaz, Director, Integrated Family Life/UNICEF, P.O. Box 30104, Addis Ababa, Ethiopia; Noreen Clark, Columbia University School of Public Health, New York, New York 10027, U.S.A.; John Pettit, World Education, 251 Park Avenue South, New York, New York 10010, U.S.A.

DESCRIPTION:

The Integrated Family Life Education (IFLE) Project was designed to show that combining literacy and numeracy classes with practical education in health, agriculture, civics, and family planning is peerless as a means of fostering self-reliance among rural adults with little or no formal schooling. An outgrowth of the activities of the Ethiopian Women's Welfare Association, the IFLE Project receives support from the Ethiopian Ministries of Health, Education and Agriculture, and from such organizations as Family Guidance and the Nutrition Institute. The project began on an experimental basis at six centers in late 1973 and has incorporated the

findings of a preliminary evaluation done in 1974 into its second cycle.

The backbone of the IFLE Project is the group leader, a responsible educated adult (usually a primary-school teacher) selected by the community. The duties of the group leader, who receives two weeks of training in techniques of leadership and who guides groups of from 25 to 35 participants, include teaching classes, making home visits, interviewing participants, filling out forms that are reviewed weekly by the leader's supervisor in Addis Ababa, and initiation self-help projects. In short, the responsibilities of the group leader mirror precisely the goals of the project. The leader receives help form extension agents, the project's administrators, community leaders, and guest lecturers who relieve part of the burden of keeping the classroom lively, but the leader's involvement and commitment are together probably the chief determinant of the project's success or failure.

The approach and subject matter stressed by group leaders vary slightly from site to site. In general, though, variations of the methods developed by IFLE's educational consultants are employed. Each lesson focuses on a concept of problem, which is represented on a lesson card bearing pictures and key words or phrases. The cards (which the participants collect in handsome binders that refer to as "their growing books") spark discussion and form the basis of literacy and numeracy studies.

The media used in the IFLE Project are visual. The cards feature pictures that are blown up and used as charts in discussion. In addition, from one of three films (on agriculture, family planning, and nutrition, etc.) have been shown at each of the six project sites. Great care is exercised to keep the graphic materials easy to grasp and to make sure that they depict community life accurately.

RESULTS:

By comparing extensive benchmark data gathered by researchers at the National University of Ethiopia with the information gleaned from post-program interviews, evaluators were able to measure gains in literacy and numeracy skills, assess changes in attitudes about development and adult education, and identify improvements in agriculture, family planning, and health practices. Attendance records, "Community Profiles," questionnaires, observable changes in the community, and the testimony of both group leaders and participants were used as a basis for evaluating the project.

At the three centers in Entoto, the literacy-numeracy level increased to an average of 89 percent for all participants. In addition, the use of pit toilets, the number of adults and children receiving vaccinations, and the level of participation in self-help programs other than IFLE increased dramatically during the project's experimental phase.

In Addis Alem, 80 percent of the participants could write more than a sentence and 77 percent could solve simple math problems at the end of the course (only 12 percent could do either at the onset). The use of covered pit toilets and of garbage pits increased only slightly among this group, but knowledge of family planning techniques increased form 2 to 77 percent, and the number who tended gardens rose from 22 to 45 percent.

In Kuriftu, where 62 percent of the participants were illiterate at the start of the project, everyone had acquired some literacy skills and most (89 percent) some competence in mathematical computation by the end of the project. Use of covered pit toilets was already high in this area and changed little. Those with knowledge of specific family planning techniques increased form 40 to 95 percent, and the number of people tending home gardens increased from 11 to 68 percent.

The IFLE center at Lumamie also wrought considerable changes. Literacy and numeracy rates were initially quite high in Lumamie, a road-side rural center; they rose form about 82 to about 90 percent (combined literacy-numeracy average). The use of covered pit toilets tended to remain low (increasing from 3 to 9 percent), but acceptance of the idea (not necessarily the practice) of family-planning increased from 22 to 70 percent. The number of people with home gardens increased from 6 to 26 percent in Lumamie.

OF NOTE:

- Deeply committed to IFLE's success, the elders in one village paid the stipend for the group leaders out of pocket when funds from Addis Ababa failed to arrive on schedule.
- According to one group leader, "in the beginning participants would say they were too old to understand (that) "the eyes can't work anymore and the mind is tired." But after classes had been in session for a few weeks, the leader said, "they told me that they were improving and that they were happy and that the mind isn't tired anymore."
- At the request of participants, group leaders, and board members, 30 of the first set of 80 cards were

changed. Most changes were made to clarify confusing or ambiguous images, or to simplify the presentation of mathematical concepts.

- Community leaders in most of the project sites passed the responsibility of selecting group leaders on to the staff or principal of the local school.
- Typically, group leaders consider their involvement in the community the most rewarding aspect of their jobs, and both completing detailed forms each week and putting up with irregular attendance the least.

REFERENCES:

Family Life Education in Ethiopia," Gus Hedberg and others, World Education Reports, No 12, June 1976.

"Integrated Family Life Education Project," John J. Pettit, World Education, January 1977

Clearinghouse on Development Communication
January 1978

SATELLITE INSTRUCTION TELEVISION EXPERIMENT (SITE) INDIA

TARGET AUDIENCE:	Inhabitants of 2,400 remote villages in less developed districts of six Indian states, and urban and semi-urban viewers in and around Delhi and Amritsar and in Kheda district of Gujarat
OBJECTIVES:	To develop and assess the potential of a satellite-based instructional television system for national development through formal and non-formal education
MEDIA:	Direct broadcast television via satellite to villages, and rediffusion via urban terrestrial transmitters
DONORS/SPONSORS:	The Indian Space Research Organization (ISRO); the Ministry of information and Broadcasting; the Ministry of Education; the U.S. National Aeronautics and Space Administration (NASA)
DURATION:	With satellite, one year (August 1975-July 1976); ongoing, relying on terrestrial television transmitters until India's own satellite is ready in 1981
CONTACTS:	Professor E. F. Chitnis, Space Applications Center, ISRO, P.O. Bag 11, Jodphur Tekra, Ahmedabad 380053 India

DESCRIPTION:

In August 1975, after six years of planning, India began a unique and massive experiment to support national development through instructional television broadcast via satellite. The primary goal of the Satellite Instructional Television Experiment (SITE) was to provide formal and non-formal educational and cultural programming to villagers in remote rural areas. The U.S. National Aeronautics and Space Administration lent India the ATS-6 satellite for one year, positioning it over the Indian Ocean. The satellite was used to beam programs to community television receivers in 2,400 villages chosen for the experiment (a potential daily audience of 2.8 million). The Indian Space Research Organization (ISRO) was responsible for the hardware ground segment of the experiment; Doordarshan (the Indian national television service) for producing the majority of the programs; and the Space Applications Centre of ISRO for program evaluation.

Programs were broadcast for four hours each day in four of India's 14 major languages, either with separate programs for each language or with a dubbed second sound track. A variety of program formats was used, including lecture-demonstrations, interviews, drama, panel discussion, song and dance, puppets, and response to viewer mail.

The largest amount of programming time was directed toward non-formal education in agriculture, health, and family planning, armed at a general adult audience. These programs, broadcast for 2 ½ hours each evening, included a one-half hour national news program in Hindi and 40 minutes to an hour of regional development-oriented programming in Hindi, Telegu, Kannada, and Oriya. The second largest amount of programming time was directed at an in-school audience of children aged 5-12; the broadcasts provided educational enrichment rather than basic curriculum, with a heavy emphasis on science education. School programs were broadcast for 1 ½ hours each day (22 ½ minutes in each of the four languages). Teachers were given some training in how to use the television lessons and how to relate them to the child's environment. They were also provided with printed program synopses prior to each broadcast, and with activity suggestions and wall posters. The third major program, teacher training, was conducted during school vacation period and was part of a larger multimedia course that used other instructional communication methods as well.

Additional ancillary activities and "experiments-within-the-experiment" included a training program for agricultural extension agents and the establishment of an experimental field laboratory for testing grassroots programming approaches. The laboratory broadcast experimental programs to a 40-kilometer radius in Kheda district using a conventional lkw terrestrial transmitter.

India's major goal was to gain comprehensive experience in developing, testing, and managing a satellite-based instructional television system, in anticipation of its own domestic satellite system. To this end, all of the ground-based material, from electronic hardware to program software, was developed and produced in India. Because the ATS-6 generated higher-powered signals than did earlier satellites, it required a less powerful and less expensive earth station to transmit the signal, which the Indians were able to build with a minimum of imported parts. Similarly, the 2,400 direct reception systems, which consisted of a ten-foot wire-mesh antenna, a front-end converter, and a television monitor, were all manufactured in India, at a cost of about $1,100 each. Special based production centers were established in Cuttack, Hyderabad, and Delhi to produce language – and area – specific

programming using one-inch videotape. Four maintenance centers were established in each of the six states, each responsible for keeping 100 community receivers in working order.

SITE was also characterized by a strong research and evaluation component. Audience profiles and needs assessment studies were conducted. A few pilot programs were designed and pretested in villages. During broadcast transmission, there was regular feedback from the audience on message impact and viewing conditions. Anthropologist who went to live in selected villages from six months before SITE until three months after its conclusion performed holistic studies on culture and communication patterns and how they were influenced by the project. Sociologists conducted surveys on the impact of one year of television on adult villagers. Psychologists studied the impact on television on primary school children.

RESULTS:

Perhaps the most significant outcomes of the SITE project were the successful coordination between the two major government agencies involved, and the successful demonstration of technical and operational expertise on a large scale, using complicated technology in a Third World country. The project gave a geographically and socioeconomically diverse population access to a wide range of information. There were statistically significant gains in knowledge of preventive health measures, family planning, animal breeding, political information, and overall modernity. While television viewing did not displace or increase use of other media, it did increase the villagers' contact with the village-level extension agents. In general, the overall magnitude of knowledge gain was greater for lower castes, illiterates, females, low-income group, and those who reported regular television viewing, that is, for groups that had less exposure to other information sources.

The first month's high average evening audience size 200 leveled off to about 50-80 per village after initial novelty wore off. Daily audience sizes depended on the agriculture activity levels and the programming expected that evening. The evening audience composition was approximately 50 percent adult males, 20 percent adult females, and 30 percent children. Small farmers and landless laborers formed the majority audience. The feedback study indicated that instructional programs and those with a message were preferred over purely entertainment programs. In the in-school program, children in television classrooms showed significant

increases in language development. Television did not, however, have any impact on school enrollment or absenteeism figures. On the technological side, the reliability of village receivers was a little over 90 percent, once initial problems were resolved. Reliability of the main earth stations was about 99 percent.

OF NOTE:

- Thirty four days before SITE broadcasts were scheduled to start, Indira Gandhi declared an Internal Emergency that involved the full censorship of all media. Many of the news segments were used to transmit information on the Emergency.
- One hundred and fifty battery-operated television sets were installed in one state in an experiment with a different reception possibility. These sets had fewer breakdowns than did those dependent on electricity.
- The SITE research and evaluation plan was conceived as a multidisciplinary exercise, involving over one hundred Indian social scientists and media researchers.
- Eighty-two percent of total SITE cost, roughly $15-$20 million, were incurred on hardware, 9 percent on software, 6 percent on management and coordination, and 3 percent on social research and evaluation.

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Clearinghouse on Development Communication
September 1979

INADES
IVORY COAST (HEADQUARTERS)

TARGET AUDIENCE:	Rural Africans (especially subsistence farmers, village women, and development workers)
OBJECTIVE:	To provide practical basic education to rural Africans as a means of supporting indigenous development efforts
MEDIA:	Print reinforced by interpersonal communication
DONORS/SPONSORS:	Established by Catholic bishops; now supported by subscribers' fees and donations of service and funds by governments and voluntary agencies
DURATION:	Founded in 1962; ongoing
CONTACTS:	Samuel Agumado, Officer, Anglophone Countries, INADES-Formation, B.P. 8008, Abidjan, Ivory Coast; Tony Dodds, International Extension College, 42 Store Street, London, WCIE 7DB, U.K.

DESCRIPTION:

Catholic bishops founded the Institut Africain pour le Development Economique et Social (INADES) in 1962 to address the education needs of African villagers. The first section established was the Cadre-Service-Africa, which sponsors courses in agriculture, industry, commerce, teaching, administration, and other fields for middle-level workers who have completed at least four years of primary schooling. In 1965, INADES began offering correspondence courses to subsistence farmers under the auspices of its second section, Agri-Service-Afrique. Two years later Cadre-Service-Africa and Agri-Service-Afrique were combined into the African Training Centre; at the same time, a Department of Women's Training (Service Feminin) was created in response to the demands of farmers who had taken the agricultural courses given by Agri-Service-Afrique. The Women's Department produces teaching materials and provides guidance for village women and female development workers. In 1972, the two sections of INADES were reorganized under a department called INADES-Formation.

INADES courses are designed to take about one year each to complete and to be taken in succession (easiest first) for four years. Each course, however, is self-sufficient, and some upper division courses are taken almost exclusively by officials and extension agents.

Courses are organized around the use of serialized booklets in local study groups organized by extension agents. These booklets, 9 to 15 of which are used in each course, were originally adapted from French material but have been completely reworked to reflect local customs and concerns. Because a high percentage on INADES subscribers are not literate, booklets used in the beginning courses are written in the simplest language (a basic 600-word vocabulary) and incorporate drawing and other visual aids, thus, readers can help those who cannot read to understand the material.

The correspondence component of INADES courses is based upon pull-out questionnaires included in each study booklet. Students are asked some control questions (to help curriculum specialists determine if the courses are understood), some questions that require subjective answers based on reflection, and some questions designed to force the student to make connections between the course content and personal experience. In addition, subscribers are invited to write letters to the questionnaire-readers on any topic they choose.

Two other components of INADES are: a program with three types of seminars—those for farmers not yet involved in INADES activities, those for participants in the agriculture courses, and those for development workers—and a research unit, which includes a documentation center. The seminars provide publicity, motivation, and a means of following up the correspondence courses. The research unit engages in planning, curriculum development, and outreach activities.

RESULTS:

All INADES training systems include evaluation components (mail-in feedback questionnaires, discussion, or observation), and courses and materials are perpetually updated in response to suck evaluation. In addition, a detailed evaluation of the overall operation carried out in 1971 showed that at the time 2,625 people had completed the first two agriculture courses, and 1,079 women social workers had taken "feminine training" courses. (An estimated 6,000 additional students followed the courses without registering for them.)

The best indicator of INADES impact in recent years is its growth. With regional offices in Togo, Upper Volta, Zaire, Rwanda, Burundi, and Ethiopia (as well as in the Ivory Coast), INADES now works in 20 African countries,

Brazil, and Indonesia. INADES materials are now available in Arabic, Spanish, Portuguese, English, and various local languages. In the midst of this prodigious expansion, INADES has kept its staff small, its per student costs low, and its emphasis sharply focused on problem-solving.

OF NOTE:

- INADES' trimestrial bulletin for extension agents, "Agripromo," gives development workers news of what their fellow workers are doing.
- Part of INADES' stated philosophy is that extension workers must allow themselves to be influenced by those they try to influence, and that all participants must pay something, however small, as tuition.
- Typical examples of INADES-Formation's involvement in the training of extension workers are a contract with a textile company and another with a state agency that monitors and regulates rice cultivation. Both projects are Ivorian, and each calls for the training of 200 people.
- Most study groups are based on existing social units (villages, families, or age groups). Most groups meet once a week or twice a month and adjourn for the rainy season.

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Clearinghouse on Development Communication
October 1977

ASSOCIATION OF RADIO CLUBS OF NIGER
NIGER

TARGET AUDIENCE:	Adult Nigeriens, especially those living outside the city
OBJECTIVES:	First, to provide information and advice in local languages to rural Nigeriens on matters related to their daily needs and to the improvement to their living conditions; second, to publicly broadcast farmer's opinions and statements on discussion topics
MEDIA:	Radio, tape recorders, print, and interpersonal communication
DONORS/SPONSORS:	Radio Broadcasting Service of Niger, the Nigerien Planning Ministry, Radio Niger, Nigerien Commission for Youth Activities, Nigerien Commission for Mass Information, and the French Government
DURATION:	Founded in June 1962; ongoing
CONTACTS:	Boubacar Danrani, Responsible de l'ARCN, B.P. 605 Niamy, Niger; Stephen Grant, Service d'Evaluation, B.P. 4717, Abidjan, Ivory Coast; Robert Lefranc, Director, Centre audio-visuel, Ecole Normale Superieure, Saint-Cloud, France

DESCRIPTION:

The Association of Radio Clubs of Niger (ARCN) was established in June 1962 under the auspices of the Radio Broadcasting Service, Radio Niger, and government officials. Its founders' goals were to promote democratic practices in Nigerien villages, to identify and train village leaders, and to set up reception centers. Underlying these objectives was the desire to provide villagers with the means to customize local programming, ridding it of its alien urban stamp, and to make heavy use of village feedback in centrally produced programming.

Radio was a natural choice as the medium to mine public opinion and to broadcast educational and civic programs because the oral tradition has long prevailed in Niger. The power accorded the spoken word has also forced the ARCN project staff members to devote scrupulous care to the formation and translation of messages and programs. The producers in Niamey prepare radio-programs in three languages: Haoussa,

Djerma, and Tamachec. The programs can be classified according to three types; lectures on topics of general interest to all Nigeriens, talks on subjects of regional interest, and taped free-form discussions by participants of issue covered in either of the first two categories of programs. Topics of general interest range from agricultural credit and environmental protection of the function of parent-teacher associations. Regionally broadcast programs include discussions of various Nigerien cities and their problems.

Listening clubs were originally formed by village volunteers supervised by the central office staff (composed at presents of a coordinator, one producer and two assistant producers, one writer, a maintenance technician, two secretaries, and a chauffeur). Gradually, the need to pay these organizers became clear, and now animators – most of whom are civil servants, teachers, male nurses, and agricultural advisers under 35 years of age – are recruited selectively and given a three-week training course on national development goals, media equipment use, data collecting, and group dynamics. Animators, who are paid both a flat fee and an increment based on productivity, are responsible for taping, interviews with both the participants and resource persons, leading the weekly post-broadcast discussions, and collecting feedback from the participants. They receive support form Niamey in form of mimeographed discussions of the upcoming program topics, instructions for handling discussion, lists of sample discussion questions, and standard forms for use in program evaluation.

The number of listening clubs formed to consider and create programs has fluctuated, averaging more than forty in the project's first years, peaking at seventy, and holding steady at about thirty in 1978. ARCN officials are apparently unconcerned about the decline, however, preferring quality in a program intended to remain experimental.

RESULTS:

No evaluation of the Association of Radio Clubs of Niger has been conducted for more than a decade, and no quantitative evaluation of learning gains or awareness levels has been attempted. A report published in the early years of the program's operation contained claims that the listening clubs and the broadcasts had had far-reaching effects in terms of identifying local leaders, creating psychological climate favorable to national development efforts, and stimulating community works projects and other social advances. Little concrete evidence supports suck claims, however, so the project's

success can only be measured in terms of ARCN's longevity (at 15 years, something of a record among development-communication projects) and its enrollment (estimates of which vary).

OF NOTE:

- The rate of return of feedback forms by the animators is reportedly 100 percent.
- Programs in Tamachec, the language of many Nigerien nomads, are broadcast only in the summer months, when the desert dwellers drive their livestock to the salt licks. Transistor radios, as well as salt blocks, are part of the camel-carried baggage of the migratory tribes.
- "Start from the standpoint of life as it now is, explain it – and transform it," is the stated philosophy of ARCN's promoters and programmers.
- Surveys, radio transmissions, and discussions cover only simple and concrete subjects.
- Nominal fees are collected from the ARCN club members, but most participants do not officially register, and revenues from participants amount to only a fraction of the sum provided annually in government appropriations and subsidies.
- Among measures taken to keep newly trained instructors from becoming intellectually isolated are systematically reviewing their work, circulating a journal containing relevant pedagogical texts, and conducting written exams to identify and reward high achievers.
- Care has been exercised to make sure that government officials, some of whom objected to ARCN at its outset on grounds that it was unnecessary or counterproductive, see ARCN as complementing and supplementing their work.
- Radio Programs, which are broadcast first on Monday night and repeated on Thursday at the same time, are always revised before they are re-broadcast. Many are run during one week only.

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Clearinghouse on Development Communication
October 1978

THE SHADAB INTEGRATED RURAL DEVELOPMENT PROJECT
PAKISTAN

TARGET AUDIENCE:	People living in 60 villages in the vicinity of Lahore (approximately 184,000 people)
OBJECTIVES:	To stimulate increases in agricultural production and marketing opportunities, to encourage the development of rural industries and housing projects, to set up cooperatives and credit schemes, to create opportunities for self-help and community involvement, and to conduct educational activities
MEDIA:	Print and interpersonal communication
DONORS/SPONSORS:	Pakistan's Integrated Rural Development Program, The Family Planning Association of Pakistan, and Pakistan's Ministry of Agriculture
DURATION:	Established in 1971; ongoing
CONTACTS:	Begum Surayya Jabeen, CPPO, FPAP, 3-A, Temple Rd., Lahore, Pakistan; Director General, Rural Development, Local Government Department of Punjab, Civil Secretariat, Lahore, Pakistan, John Rowley, International Planned Parenthood Federation, 18-Lower Regent Street, London SW1Y 4PW, England

DESCRIPTION:

The Integrated Rural Development Project at Shadab followed a string of integrated development projects that were at best half-successful. Like its failed predecessors, the project was designed to increase agricultural production. But it embraces virtually every aspect of rural life—something most of its forerunners did not. The components of the Shadab Projects include community development, agricultural education and assistance, banking and credit schemes, elementary education for both adults and children, and a multi-dimensional family-planning element that includes vocational training, youth work, and literacy courses.

The linchpin of the Shadab Project, which serves as a pilot and model for the IRDP in Pakistan, is organization. Coordinated under an umbrella whose spines are most flexible at the greatest distance from the center are all government agencies involved in rural development, as well as all semi-official, private, and commercial concerns with the same interests. The 60 villages in the project area are divided into ten union councils, and technical, material, and educational services are provided at the level of the administrative center, the *markaz*. This system is supervised by a project manager assisted by two helpers (one who manages technical affairs, another who watches over the cooperatives) and ten lower-level assistants (graduates of agricultural colleges who offer farmers advice and organize activities at the union-council level).

The approach to rural development taken by the Shadab Project's directors is to give the villagers the wherewithal to need to order their development priorities for themselves. Often, information is enough. But when it isn't, the project's beneficiaries use the same channel through which information flows to get other kinds of help: they go to the *markaz*, where most government and other agencies have representatives. The same administrative centers serve as the headquarters for the federated farmers' cooperatives.

At the village level, the project manager's ten assistants dispense information and supplies, help farmers arrange for the sale and shipment of produce, negotiate loans and credit for farmers, tend demonstration plots, help farmers put on agriculture fairs and exhibitions, and conduct meetings. Time permitting, they also organize youth clubs, oversee the provision of rudimentary health services, and form adult-education classes.

Adult-education classes are also conducted by the Family Planning Association of Pakistan in conjunction with this project. Utilizing trained teachers and print materials, these classes focus heavily on family-planning messages. Family-planning workers encourage local adults to attend the classes, and volunteers from the literacy classes also serve as agents to motivate people to try family-planning devices.

The long-range goal of the Shadab Project's director is to get government funds decentralized and dispersed through the *markaz*. Meantime, near-term plans include conducting training seminars for field staff and rallying more local leaders to the cause.

RESULTS:

Apparently, the Shadab Project has not been evaluated systematically. Signs of its successes and weaknesses have, however, caught many observers' eyes, and the family-planning component has been assessed quantitatively.

Indicators of success include a fourfold increase in agricultural production in one high-rainfall area included in the project, the fourfold increase in the number of family-planning acceptors in one year (from 779 in 1973 to 3,322 in 1974), and the construction of an all-weather road that facilitated trade and that brought government staff to some isolated villages for the first time. In addition, some farmers report getting two crops per year out of land that used to support only one and making other breakthroughs in crop yields.

On a more negative note, the speed with which project workers hoped local successes would be multiplied was, it is now thought, highly unrealistic given the limited availability of resources and trained personnel, and given the bureaucracy's predictable resistance to total integration. Nevertheless, as of early 1978, some 635 projects modeled after the Shadab Project had been started in rural Pakistan.

OF NOTE:

- Nine primary schools and 35 adult-education centers established in the Shadab area double as facilities for the People's Open University, which caters to rural people interested in pursuing vocational and technical training or taking university-level courses.
- Leaders and other key villagers were organized at the project's inception into a "model committee" whose guidance has proved critical to the Shadab Project's success.
- An estimated 95 percent of the farmers in the Shadab Project area were illiterate when the project began.
- Originally, the project manager was supposed to enlist the support of voluntary agencies, but most such agencies in the area turned out to be defunct, short of resources, or too poorly organized to be effective.
- According to the first project director, an impediment to achieving "horizontal coordination" in rural development is the feeling among those in various government departments that IRD is a superior department and a potential threat to the sovereignty of other agencies. "We are trying to convince them

that we are not a department, but a program," he said while in charge.

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"Punjab's Push for Prosperity," John Rowley, People, Vol. 2, No. 3, International Planned Parenthood Federation, London, 1975.

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Clearinghouse on Development Communication
April 1978

AUDIO CASSETTE LISTENING FORUMS
TANZANIA

TARGET AUDIENCE:	Tanzanian women of Majengo and Kimundo (approximately 120 people)
OBJECTIVES:	To enable women to participate in the planning, implementation and evaluation of a development program, thus increasing their confidence and ability to improve the conditions of their own and their families' lives
MEDIA:	Audio cassettes, print, and interpersonal communication
DONORS/SPONSORS:	The Women in Development Office of the U.S. Agency for International Development, Room 3243, Washington, D.C. 20523
DURATION:	One year (1978); project renewal pending
CONTACTS:	Alisa Lundeen, Project Officer, Arusha Women's Participation in Development, USAID, P.O. Box 9130, Dar es Salaam, Tanzania, Women in Development Office, USAID, Department of State, Washington, D.C. 20523, U.S.A.

DESCRIPTION:

The Audio Cassette Listening Forums were conceived and carried out as a one-year pilot project aimed at making women more aware of their potential to be actors in the development process. The primary objective of the ACLF project was to involve the project participants in planning, implementation, and evaluation of a development project that centered on needs chosen by the participants. A secondary objective was to use audio cassettes and other relatively inexpensive and uncomplicated media in a development education program and to test their effectiveness. Project components included a needs-resource survey conducted and planning by the women participants, the local production of both problem-posing and informative tapes, discussions and planning by the women participants, and the implementation of some of the plans developed by the women.

Using three criteria—accessibility to the project center in Arusha, the presence of potential control groups within the immediate vicinity, and familiarity with the ACLF staff—the project planners selected Kimundo and Majengo as the project sites and Poli and Patanumbe as the control villages. The project sites selected represent underpinnings into perspective. Majengo, established in 1975, is arid and subject to drought. Its constituents come from many tribes, make only a subsistence living off the land, and do without such basic services as medical care. Before the project began, Majengo's women's group met sporadically and failed to draw a large membership. In contrast, Kimundo is a relatively affluent village whose land is fertile and whose climate is hospitable. It enjoys easy access to schools and hospitals, and its women's organization (in operation since 1962) has long been actively involved in road-building, church-improvement schemes, village gardening cooperatives, and other local development projects.

Five group leaders from each village were selected at a general U.W.T. (Umoja wa Wanawake—Tanzanian Women United) meeting at which the project was described in detail. The five women selected attended a five-day training seminar in Freirean group dynamics and leadership techniques, conducted a pre-project needs survey, met weekly as a group to discuss project priorities and activities, taught project participants how to use the tape recorders, organized discussion groups and subgroups, and helped participants execute the plans formulated in these groups.

Questionnaires passed out by the group leaders to participants were intended to identify the participants' needs but instead provided sketchy and self-contradictory information. Interviews conducted by the group leaders, on the other hand, both provided the essential information and served to involve the potential participants emotionally in the project. Typical of the problems that surfaced in the interviews and that received attention later in the discussion groups were lack of water, inadequate sanitation, chronic drunkenness on the part of villagers, improper nutrition, and lack of clothing for children.

The communication strategy used in both the seminars and the discussion groups involved the integrated use of audio-cassette tape recorders and group discussion. The audio-cassette tape recorders were chosen because the cassettes are reusable, the technology enables the target audience to control the communication process and to offer on-the-spot feedback, users of the technology need not be literate, audio cassettes can be produced easily in the local dialect, and tapes extend the reach of project personnel.

Problem-posing tapes were developed locally and provided a focus for discussion. Some of the information tapes, which covered such subjects as cholera symptoms and the principles of sanitation, were also developed on site, though many were produced by local health educators in response to requests made by discussion-group leaders.

RESULTS:

In post project interviews, 73 percent of the responding participants in Kimundo reported haven taken health-related actions related to the project, as did 63 percent of the Majengo respondents. As measured by pre-testing, post-testing, an evaluation seminar, and an unstructured observation, attitude changes were also considerable. Women's positive attitudes toward their environment and toward their own ability to improve their prospects increased significantly in the participating villages and failed to increase at all in the control villages. In Majengo, the increase was gauged at 100 percent, ostensibly because the women's group there had not had a strong impact before the project began. In contrast, attitude changes in Kimundo were slight, though positive. Both findings prompted the project staff to conclude that ACLFs probably have the greatest impact in communities in which no organization or systematic consciousness-raising has taken place prior to the onset of project activities.

Most of the project staff's assumptions about the appropriateness and effectiveness of audio-cassettes technology proved true: the extension personnel did reach more people than they had, local production of tapes kept the project in local control, the tapes were duplicated and reused, illiterate women were able to handle the technology, and the tape recorders held up well and involved only minor maintenance costs. Eighty-two percent of the women of Majengo and 88 percent of the Kimundo participants found the tapes useful, while 39 percent of the Majengo respondents and 47 percent of the Kimundo respondents names cassette use as their favorite project activity.

Both women's groups have laid plans for continuing the discussions and activities that were initiated as a part of the ACLF project. Unlike their counterparts in Kimundo, however, the Majengo village women thought the technology less vital than group discussion to the group's success. They recommended during the evaluation that future projects not include the technology; they contended that the process was most important and most replicable.

OF NOTE:

- A local singer wrote songs on each of the listening-forum topics. The songs were of the same two types as the tapes: informative and problem-solving.
- Locally manufactured tape recorders remain more expensive than imported ones, but the difference is diminishing, and many villagers already have audio-cassette players in their homes.
- Recognizing the potential of audio-cassette technology, two ACLF seminar participants developed and ran a health-nutrition information program on their own. They developed several message tapes that are now being used in clinic waiting rooms and in maternal and child-health classes.
- Since the tapes concerned were locally produced, no attempt was made either to spread the ACLF messages beyond the target areas or to include any but requested information on the tapes.
- Holding small group meetings separate from the larger discussions inculcated the suspicion among some villagers that the small groups were breaking away from the established U.W.T. groups to start new organizations. This fear was allayed when small group meetings were rescheduled to convene immediately prior to the full sessions.

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"Audio Cassette Listening Forums: First, Second, and Third Quarterly Reports (February 1978 through April 1978)," Alisa Lundeen, Martha Mollel, and Joyce Stanley, unpublished documents, 1978.

Clearinghouse on Development Communication
September 1979

THE LOWER YUKON (SKYRIVER) PROJECT U.S.A.

TARGET AUDIENCE:	Alaskan Eskimos and government officials
OBJECTIVES:	To develop a process whereby Eskimo villages could identify their needs and problems, agree upon suitable actions, and then seek solutions on their own terms
MEDIA:	Film and video
DONORS/SPONSORS:	U.S. Office of Economic Opportunity
DURATION:	1970 through 1972
CONTACTS:	Tim Kennedy, Cornell University, Dept. of Communications Arts, 640 Stewart Ave., Ithaca, New York 14853, U.S.A.

DESCRIPTION:

With funds form the U.S. Office of Economic Opportunity, the Skyriver Project began in 1970 with a single film crew working in Emmonak, a lower Yukon River village. The project was organized as an experiment in using filmmaking to organize communities.

The people of the target village first selected a project organizer form their own ranks. In open-ended meetings with local men and women, the community then identified respected community leaders and pressing local issues (a lack of local schools or poorly built housing, for example). These leaders were encouraged to talk about and offer solutions to village problems before the camera in whatever language, setting, or format they liked. After a private screening during which the person interviewed could delete or add material, the film or tape was released to the project organizer for approval and to the community to stimulate further discussion and clarification of the problems. The Skyriver crew meanwhile provided information such as the names of government agencies that deal with a given problem or the name of those who actually make the decisions. Gradually a film emerged, one that reflected a community consensus.

A completed film was taken to Juneau and shown to government officials and other groups interested in social welfare. The Skyriver crew taped video

responses from these people, which were sent back to the filmed community for viewing. The same films were also sent to other rural villages to promote the concept of using videotaped forums.

Not all the films focused on problems, however. Some depicted the positive aspects of the Eskimo's way of life and were intended simply for the enjoyment and education of people in other cultures.

RESULTS:

Films used in the Skyriver project have brought major changes in government policy. A film in which Eskimos complained of having to send their children to boarding schools (because there were no schools nearby) prompted the Alaskan Department of Education to rethink its school development strategy; now high schools have been built for small villages. Another film depicted the hardships of life in low-income housing forced a housing planner out of office and reshaped the state" approach to low-income projects.

Some of the Skyriver Projects' other results are more difficult to measure. The Eskimos became more attuned than they were to what government can and cannot do for them. They became less factionalized as they learned more about the problems of their immediate neighbors and of people in the next village. This knowledge helped them protect their culture form encroachment by western institutions. At the same time, state officials received first-hand accounts of rural hardships from people they would not normally see.

OF NOTE:

- Skyriver had trouble finding filmmakers and video operator who could work within the project's special framework—in which editing distribution, and content were controlled by the film's subjects, rather than by the filmmakers.
- Skyriver's second film crew was composed of two Eskimo men. Project Director Kennedy felt that the pair got material that a crew of outsiders could never have gotten.
- After reviewing the rough takes, villagers voted on whether a given film seemed true to community feelings and consensus.
- In some cases, film was better than videotape for interviews. The several weeks necessary to process the film allowed the subjects to think over what they had said to make changes. In general, film and video had different limitations and advantages.

REFERENCES:

"The Skyriver Project: The Story of a Process," Tim Kennedy, Access, No. 12, National Film Board of Canada, March 1974.

"Videotaping: Process in Community Development Discussed by Tim Kennedy at Center Seminars," Instructional Technology Report, Washington, D.C., July-August 1974.

Clearinghouse on Development Communication
June 1977

PROJECT FOR EQUALITY OF ACCESS TO EDUCATION FOR WOMEN AND YOUNG GIRLS
UPPER VOLTA

TARGET AUDIENCE:	Rural women and girls in three regions of Upper Volta
OBJECTIVES:	To provide practical education as a means of improving living standards and the status of women in the community; to train teachers to perpetuate the movement
MEDIA:	Radio, film, slides, dramatizations, printed materials, interpersonal communication
DONORS/SPONSORS:	The Government of Upper Volta (the Ministry of Education and Culture, and other agencies in Upper Volta's 11 Organizations for Rural Development); UNESCO; UNDP; ILO; FAO; and other international, governmental, and non-governmental agencies
DURATION:	Planned and initiated in 1967; ongoing through at least 1981
CONTACTS:	Resident Representative of UNDP, P.B. 575, Ouagadougou, Upper Volta

DESCRIPTION:

The Government of Upper Volta and UNESCO together implemented the project for equality of Access to Education for Women and Young Girls in1967 to improve living standards in 83 villages and to increase the community status of females. To lay foundations for such broad reform, the project staff adopted clearly defined intermediate goals. It conducted sociological studies to identify the obstacles to women's access to education, launched literacy campaigns for rural women, instituted both training programs for community educators and feminine-leadership programs, and sponsored basic educational courses in nutrition, agriculture, home economics, health, and the establishment of micro-industries and craft cooperatives.

A pre-project need-assessment was conducted nationwide in 1967. Kongoussi, Banfora, and Po—three

regions with different ethnic and linguistic constituents and different economic conditions—were then selected as pilot sites. Since Voltaic women, busy from before sun-up to after sun-down, had no time to spare for educational activities, the first phase of the project became the introduction of labor-saving devices: wells, milling appliances, carts, and maternity clinics. At the same time, life-saving devices—education programs in hygiene, nutrition, and health—aimed at relieving women's psychological and physical burdens were introduced.

Since the three pilot projects were not started simultaneously, the point at which time and health constraints had been reduced enough to allow villagers to participate in literacy and vocational training varied (from roughly 1970 to 1975). However, radios had been distributed and listening groups had formed early in the project, and both figured centrally in the agriculture and village improvement campaigns. Thus, radio forums became one of the two major modes of instruction. (In-school programs, the other major mode, were designed primarily for girls).

As a rule, programs are prepared weekly in local languages. They include debates on the successes and problems affecting activities and other concerns of the village women, and they incorporates both the views of village women and songs composed by local musicians about project activities. During training, the village female leaders enact theater sketches and the village women take part in cultural performances that represent a continuation of village plays—the traditional vehicle throughout Africa of social comment, social control, and area news. In addition, movies and slide shows prepared and shown locally are followed by discussions. This inter-village, inter-regional, and rural-urban exchange is further strengthened by the distribution of vernacular newspapers.

RESULTS:

An evaluation of the Access project, conducted in 1974 by a commission composed of representatives from the Upper Voltaic Government, UNDP, and UNESCO, identified poor transportation, poor communication facilities, a lack of production and distribution facilities for the materials needed in the literacy program, and a shortage of trainers for literacy and community development programs as the chief obstacles to realizing the project's goals. At the same time, the committee advanced the idea that literacy programs must address men as well as women if they are to succeed, since illiterate men are not apt to encourage

their wives and daughters to seize opportunities that they themselves do not enjoy. The most intractable problem has been the paucity of employment possibilities for women who manage to acquire literacy and vocational skills. According to one UNESCO report, training has in many instances proved inappropriate, and employers continue to discriminate against women.

The activities undertaken since 1967 are the subject of an evaluation currently underway; particular attention is being paid to the impact of technologies upon the women's use of time and their productivity. Statistics released in 1976 show that 109, 042 villagers had been involved in the project in ten years, approximately 100 midwives had been trained, 427 latrines had been built in conjunction with the sanitation component, 85 listening groups had been formed, and 42 *"monatrices"* (female village-extension workers) had established residence in 42 villages.

At present the project is being expanded to cover the whole nation. Its activities will be implemented by the Ministry of National Education and Culture with the collaboration of the Ministries of Rural Development, Health and Social Affairs, Environmental Affairs, and Labor.

OF NOTE:

- In the early years of the project, teachers were selected from the ranks of qualified primary and secondary-school instructors. Later, some won fellowships abroad to study non-formal education techniques.
- Female village-extension workers residing in the villages serve as liaisons between the regional teams and the female village leaders (midwives and others).
- The radios and milling machines supplied in conjunction with the projects were plagued by mechanical difficulties. Consequently, the project incorporated an appropriate technology unit to carry out research and experiments aimed at helping the women do their chores more efficiently and quickly.
- Upper Volta is one of the world's least economically developed countries, and its population is 95 percent rural.
- A national coordinating team working closely with three regional teams formulates, programs, and coordinates project activities at the national level.
- While the status of Voltaic women is generally beneath that of men, regional differences in female status forced project organizers and curriculum

designers to tailor literacy materials and activities to the specific needs of each local group.

REFERENCES:

"Project Experimental: Egalite d'Acces des Femmes et des Jeunes Filles a l'Education." Report of the Upper Volta National Commission for UNESCO, Ouagadougou, May 1974.

"A New Chance for Rural Women," Mary Lynn Hanley, Action UNDP, January-February 1975.

"Le Projet d'Egalite d'Access des Femmes et Jeunes Filles a l'Education: 1967-1976," Ministry of National Education and Culture, Ouagadougou, November 1976.

Clearinghouse on Development Communication
January 1978

EXPERIMENTAL NUTRITION PROJECT
BRAZIL

TARGET AUDIENCE:	Villagers in Northeast Brazil
OBJECTIVES:	To open up a community dialogue on nutrition as a first step to community action
MEDIA:	Posters, pictures, and flannel boards
DONORS/SPONSORS:	Cornell University's Division of Nutritional Sciences
DURATION:	Initiated and completed in 1974
CONTACTS:	Therese Drummond, Director for Nutrition and Rural Community Education, Agricultural Missions, Inc., 475 Riverside Drive, Room 624, New York, New York 10027, U.S.A.

DESCRIPTION:

This project was designed to test the receptivity of people in villages with various types of community organization to the method of Paulo Freire as used in nutrition education. Carried out in 1974, this experiment was aimed at involving non-literate or semi-literate villagers in an attempt to discover that malnutrition is a problem and to set up simple ways for the people to begin to alleviate certain aspects of malnutrition in young children.

The first five week segment of the program was devoted to visiting the approximately 120 homes in the four target villages. Deliberately dispensing with the use of forms and questionnaires, Ms. Drummond chatted informally with the villagers to find out how they thought and felt about food and the feeding of children. More particularly, she inquired about the prevalence of illness and death among young children and about the number of underweight children under four years of age. She also collected names, birth dates, and data on breast-feeding practices, age distribution, and eating habits—which she recorded in simple copybooks that were familiar to the villagers.

In the group meeting that followed the visits, posters were used to stimulate discussion. For example, a

picture of a baby's coffin being carried to the cemetery, a common site in the area, provided an opportunity to discuss the fact that babies often die and to look critically at this fact rather than accepting it fatalistically. Other posters pictured a women breastfeeding an infant, a mother giving her child supplementary food, or a child suffering from advanced malnutrition.

RESULTS:

Transcripts of tapes of many of the village meetings show that people were involved whole-heartedly in the meetings and the issues. Their transcribed comments and questions also reveal that the villagers at least began to question their deeply entrenched fatalism and, conversely, their own power to improve their lives. The records of the meetings also suggest that those in previously unorganized villages were neither helped nor hindered in this project by their past experiences in group interaction.

As a direct outcome of these meetings, the villages selected one person for every ten households to take responsibility for the nutritional well-being of the group's children. Plans for coping with various health emergencies were also developed. However, no provision was made for determining whether those who participated in this communications and nutrition project did indeed see that their children continued to get adequate protein and, among other things, vaccinations against childhood diseases.

OF NOTE:

- In one meeting in which it was asked if a "study" of the children should be made, the villagers—who associate study with school—got the impression that the nutritionist planned to set up a new local school.
- A flannelboard reproduction of the Morely weight chart was used to convey the idea of safe weights for young children. When parents grasped the significance of the safety range, called the "Caminho de Saude," or "Path of Health," they were given a mimeographed copy of the chart.
- The posters used in discussions featured either photographs or paintings made from photographs. The background was blotted out to forestall inference. Care was also taken to choose pictures that were neither too limited in reference nor too enigmatic.
- Pleading a poor memory, the interviewer sketched much of what she saw. These sketches engaged the villages and put them at their ease; their use

thus simplified the task of collecting health and demographic data.

- During one meeting, a fisherman proclaimed that meetings in general were a good idea. Not once in the eight years that he had lived in the target village had the people met to solve or share their problems.

REFERENCES:

"Using the Method of Paulo Freire in Nutrition: An Experimental Plan for Community Action in Northeast Brazil," Therese Drummond, Cornell International Nutrition Monograph Series, No. 3, Cornell University, Ithaca, New York, 1975.

Clearinghouse on Development Communication
June 1977

NUTRITION MASS COMMUNICATION PROJECT
INDIA

TARGET AUDIENCE:	Opinion leaders, head of households, housewives, teachers, and school children in rural areas and small towns in Uttar Pradesh and Andhra Pradesh) approximately 250,000 people)
OBJECTIVES:	To determine the effectiveness of a mixed-media campaign in raising levels of awareness and understanding about weaning and pregnancy among rural, largely illiterate populations
MEDIA:	Radio, print, film, calendars, pantomime, posters billboards and wall printings, and dust covers for school books
DONORS/SPONSORS:	The U.S. Agency for International Development, CARE-India
DURATION:	Conceived in 1969; set up early 1971, conducted from April through June of 1972
CONTACTS:	Sadhna Ghose, CARE-India, P.O. Box 3064, New Delhi-3, India, Ronald Parlato and Margaret Burns Parlato, 4915, Albemarle Street, N.W. Washington, D.C. 20016l, U.S.A; Dr. Lakshmi Kistmamurth, CARE-India

DESCRIPTION:

The nutrition-information project launched by CARE-India in 1972 after three years of research and preparation was built upon two primary assumptions. The first was that the modern techniques used in urban mass media campaigns and market research can be successfully brought to bear upon the problems and needs of the Third World villager. The second was that a combination of carefully selected mass media is more effective than any single medium in reaching diverse target groups within a given population. More specifically, the experimental project was designed to test the relative effectiveness of positive and negative messages and to promote two particular messages: one related to the impact of proper and timely weaning upon a child's long-term health and one related to the importance to mother and child of eating green leafy vegetables during pregnancy.

Preliminary research and project design were accorded high priority in the CARE-India project. So that people would not be urged to buy foods that were unavailable, culturally taboo, or expensive, a team of researchers spent six months identifying economic, nutritional, sociological, and trade-related obstacles to benefit changes in dietary habits. This research preceded and influenced the selection of the target audience, the eight target sites (each composed of three villages and one town), the media that would be used to relay the messages, and the specific content and wording of the messages. The research drew upon studies from various disciplines, included the research of other nutrition and communication projects, and involved a pre-campaign study of 2,400 sample respondents.

The ten-week campaign that grew out of the research findings made use of a variety of media but made no attempt to dazzle the target audience with novelties. Instead, simple messages that were designed to appeal to basic emotions and to ingrained beliefs were used. In Uttar Pradesh, where the positive approach was taken, some posters depicted a small boy being commended by his teacher, and others showed a village lad receiving a trophy for his athletic prowess. In Andhra Pradesh, where the more controversial negative approach was adopted posters depicted a demon (a recongnizable figure derived from South Indian mythical tradition) threatening the well-being of a pregnant mother in one case and a weaning infant in another. The same tactics were used and the same messages were carried in press inserts, billboards, wall paintings, short black-and-white films, radio spots, special editions of tabloid newspapers, calendars, booklets, and comic books. Since the campaign was expressly designed to test the effectiveness of mass media alone, interpersonal interventions were not part of the overall effort.

RESULTS:

Campaign evaluation results, based on a baseline survey (2,500 interviews) and a post campaign survey (2,500 interviews), indicated that a mixed media campaign can successfully reach isolated rural audiences with new concepts and information. Apparently, a media mix designed especially to reach different sub-audiences can, through direct appeal, cress socio-economic and cultural lines. The survey showed that men and women of all ages, educational levels, occupations, income levels, and castes responded equally well to the nutrition campaign, raising their awareness scores by the same number of points. On questions related to pregnancy, for example, scores for

housewives rose from 53 to 84, while those of influential villagers rose from 63 to 95. In general, illiterate members of lower castes learned as much as highly-educated Brahmins.

Supporting the contention that mild shock is a valuable agent in promoting increased awareness and understanding of new ideas is the fact that 100 percent of those people exposed to negatively expressed messages remembered the campaign, while 91 percent remembered the positive message. Similarly, campaign audiences in Andhra Pradesh were more likely than their counterparts to remember specific media, to score high on the post campaign test of knowledge, and to recall specific facts stressed during the campaign. The negative campaign may, the researchers speculate, have worked better because it was more creatively distinctive and more in tune with village culture.

The evaluation of the effectiveness of the various media showed that people exposed solely to highly entertaining graphic media learned as much as people exposed to al media. In both the positive and negative campaigns, films and posters proved most memorable; half those polled in Uttar Pradesh remembered the films and 65 percent remembered the posters, while the comparable figures for the negative campaign were 70 percent and 67 percent, respectively. Tabloids and radio spots were ineffective in both campaigns, few than 17 percent of Uttar Pradesh and few than 21 percent in Andhara Pradesh remembered either. Although the campaign was designed solely to raise levels of awareness and understanding, it appeared to have favorably influenced attitudes too. In three out of four cases (the weaning message in A.P. and the pregnancy message in both provinces), there was virtually no reluctance to accept the campaign information as credible. In the fourth case, the expressed resistance was felt to have reflected dietary differences: the brittle eaten in U.P. may have been harder to visualize in pulverized form that other foodstuffs, such as the rice eaten in South India.

OF NOTE:

- Booklets designed for teachers carried letters of approval and support signed by the two states' top education officials. So too, popular Hindi and Telegu film stars appeared in one-minute endorsements at the end of each of the films.
- Radio was found to be largely ineffective in the campaign, since relatively few people in the target areas owned or had access to radio sets.
- A KAP study on selected nutritional topics was carried out as part of the pre-campaign research.

- The "two-step" theory of information flow was not verified by the campaign. Specialized and highly detailed information disseminated to teachers and influentials only through booklets was not passed on to the general populace.
- Pantomime, felt to be closely related to traditional Indian dance in its non-verbal communication, was found to be too abstract for most audiences.
- More than a project write-up, CARE-Indian's report of the results of this nutrition-information project includes both a model for running a nutrition education campaign and a comprehensive discussior of the sociological and communication issues with which campaign workers and officials must grapple.

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Clearinghouse on Development Communication
January 1978

PROJECT POSHAK
INDIA

TARGET AUDIENCE:	Preschool children and both pregnant and lactating mothers in rural Madhya Pradesh (roughly 13,000 children and 2,500 women form 1971 to 1975)
OBJECTIVES:	To improve nutritional status of the target audience by making food supplements available, offering childcare education, and augmenting health care in existing clinics
MEDIA:	Films, slide show, dramatizations, demonstrations, flipcharts, and interpersonal communication
DONORS/SPONSORS:	CARE, the U.S. Agency for International Development, UNICEF, the Central Government of India, and the state government of Madhya Pradesh
DURATION:	Begun in 1971; concluded in 1975
CONTACTS:	Douglas Atwood, Care-India, B-28 Greater Kailash I, New Delhi-110048, India; Dr. Tara Gopaldas, Professor and Head, M.S. University, Baroda-2, Gujarat, India; Merlyn Vemury, Nutrition Specialist, CARE, 660-First Avenue, New York, New York 10016, U.S.A.; Tina Grewal Sanghvi, Office of Nutrition, Agency for International Development, Room 720, SA-18, Department of State, Washington, D.C. 20523, U.S.A.

DESCRIPTION:

Project Poshak was implemented in 1971 in Madhya Pradesh primarily to demonstrate the feasibility of utilizing state's health-care network (450 Primary Health Centers and satellite sub-centers) to distribute food supplements, offer child-care education, and provide extra health service sin order to boost the nutritional state of pre-school children, pregnant women, and lactating mothers. Its secondary purpose was to test the cost-effectiveness of various types of programs activities and levels of supervision. The project entailed a planning phase, an exploratory phase, and extensive phase, and a final phase of intensive, full-scale activity. The exploratory phase took place in four districts, the

extension phase in seven districts, and the intensive phase (which was research-oriented) in one district.

Three beliefs informed *Project Poshak*. One is the feeding program conducted in schools, hospitals, or clinics have little on the beneficiaries' long-term eating habits unless they are backed up by nutrition-education programs. The second is that since the quality of the food a young child requires is often more at issue than the quality, parents must be convinced of the wisdom of dietary supplementation before their children are admitted of feeding programs. The third is that innate good comes from involving the mother and the family in the program—hence, the advantage of giving the extra food to the child at home rather than in an institutional setting. All three beliefs were reflected in the practical goals of the project: to compensate for an inadequate infrastructure by making the private home rather than the clinic the final delivery point, to educate the families of the beneficiaries so they would understand the importance of giving the food supplements to the intended recipients, and to integrate health services.

Staff training consisted of formal one-week sessions and on-the-job training. In all, four formal sessions were conducted: the first for pediatricians and other highly trained medical personnel, the next three for paramedics, health workers and nurses, and auxiliary nurse-midwives. Designed partly to fill a gap in the medical school curricula, these courses were structured to give maximum play to discussion, participation, and feedback. Course-takers were also steeped in the practical aspects of the food to be distributed, the use of equipment and drugs to upgrade medical services, and the manipulation of educational media.

Pamphlets were distributed during the preparatory stage of the project to dispel prospective participants' doubts about the motives of the project staff and to fire interest in the project. During the operational stage, simple visuals were used by paramedics who made fortnightly visits to each family in the program. Care was taken to insure that pictures, flipcharts, and slides portrayed familiar objects (a cow and pail, and not a glass milk-container, to signify milk, for example). Slide shows make possible by battery-operated projects proved popular, but lack of vans, generators, and other equipment made motion pictures virtually impossible to use.

RESULTS:

During Project Poshak's four year history, the food intake of the beneficiaries increased steadily and

significantly. In addition, indirect benefits were realized. Four example, the image of auxiliary health workers improved in the eyes of the villagers, attendance at primary health centers picked up, and more people took part in immunization drives and family-planning programs.

Most of the problems that beleaguered those conducting the feasibility study were logistical and administrative. Apathy among both the target audience and the project workers, misunderstanding of the projects' goals, lack of personnel, the medical staff's preoccupation with curative and family-planning programs to the neglect of nutrition, and changes in the food mix distributed as part of the program are some of many. The region's climate and geography also posed problems, some of them nearly insuperable.

Arguably, Project Poshak was a success to the extent that a significant number of impoverished and undernourished women and children in over 500 villages in 12 districts enjoyed better health as a direct outcome. But (since the main thrust of the experiment was to test the feasibility of using a particular service structure) efficiency, cost, and replicability are the proper criteria for judging the project's impact. On the face, it appears that the project was successful in this sense was well since many of the obstacles encountered did not prevent the effective distribution of food, teaching materials, and supplies—the object of the experiment.

OF NOTE:

- The government's sponsorship of the family-planing program was greeting with considerable negativism when the program began. This reversed completely within a few months of the inception of the nutrition program, however. The Health Center staff attributed this change to increased rapport, to home visits, and to the availability of food and education at the Health Centers.
- Of the total food taken home, 30 to 50 percent was consumed by children in the 1-to-3 year age group, 10 percent by infants under one year of age, and the rest by other family members. Pregnant women consumed only 25 percent of the food intended for them, nursing women only 60 percent.
- Three studies conducted as part of this experiment covered (1) the comparative effects of changing for food supplements and of distributing them for free, (2) the relative effectiveness of using village schools versus health clinics as distribution centers, and (3) the drawbacks and advantages of providing rations

to be taken at the clinics and of issuing take-home rations.

- Although explicitly invited to enroll in the program, many pregnant women refused because they feared admitting pregnancy would turn the "evil eye" upon them, they did not want to be examined by male doctors, or they failed to see the need for meeting additional nutritional requirements during pregnancy.
- Madhya Pradesh was chosen as the project site partly because it typifies a hardship environment. Much of its land is unproductive, its sparse population is scattered and hard to reach, and its average income level ranks among India's lowest.

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Clearinghouse on Development Communication
January 1979

MASS MEDIA VS. DIRECT EDUCATION PROGRAM
MEXICO

TARGET AUDIENCE:	Mothers with children five years old and younger
OBJECTIVES:	To test the effectiveness of mass media techniques as compared to direct methods of education in transmitting basic concepts of hygiene, health, and diet
MEDIA:	Radio, pamphlets, posters, interpersonal communication
DONORS/SPONSORS:	Instituto Nacional de la Nutricion, Consejo National de Ciencia y Tecnologia de Mexico
DURATION:	1976
CONTACTS:	Dr. Adolfo Chavez, Director, Division de Nutricion, Instituto de la Nutricion, Av. San Fernando y Viaducto Tlalpan, Mexico, 22, D.F., Mexico

DESCRIPTION:

In 1976 Mexico implemented a project to compare the effectiveness of mass media vs. direct education in transmitting information on health and nutrition to rural mothers with children five years old or younger. Three rural communities were selected for the project: one to receive nutrition information through a traditional classroom setting, the second through the mass media, and the third to serve as a control group. Community assessments were completed to guarantee homogenous populations that met the following criteria: 1) agriculture-based economies, 2) approximately equal populations, 3) equal access to urban or market centers, 4) equivalent public services, such as water, electricity, education, and radio reception, and 5) no local health services. The three communities are located in the same state, approximately 150 kilometers west of Mexico City.

A market survey was conducted to identify locally available foods. A dietary survey was don to determine the eating habits of a random sample of 120 mothers with children five years old or younger. Finally, a questionnaire was administered to the sample of mothers to determine their degrees of knowledge about

nutrition. Each interview lasted about 20 minutes and was conducted by three senior nutrition students.

The direct (classroom) education program was taught by three nutrition students over a 12-week period. Two class meetings of two hours each were conducted each week, with the presentation of principles and discussion one day, followed by demonstration and practice the next. A total of four units were covered, each taking three weeks to complete. Unit One explained budgeting for an adequate diet, adding fruits and vegetables, and preparing high nutrition, low-cost dishes. Unit Two dealt with infant feeding, nutrition, breastfeeding, solid foods, and low-cost infant foods. Unit Three examined diets for pregnancy, variety, and food taboos. The final unit was concerned with hygiene in cleaning, preparing, and storing food and utensils.

The mass media campaign was carried out over the same 12-week period. Radio spot announcements, pamphlets, and posters were employed to cover the same topics as the four educational units. The radio spots consisted of four songs lasting three minutes each. Each song was broadcast for three weeks, once every two hours. The songs addressed the same themes as the four units. Three pamphlets were distributed to mothers in the sample population and to schools, churches, and local stores. The first dealt with diet, food combinations, and the importance of variety in food consumption. The second addressed infant nutrition and food preparation. The third showed how to prepare a puree with beans and tortilla mix. The three pamphlets were made available for one month each. The four posters were also designed to coincide with the four units. Each poster was distributed to the sample population of mothers and posted in schools, churches, stores, and other public areas in the community. Posters were distributed every three weeks in the same sequence as the educational units.

After the 12-week campaign was completed, a study was done in the three communities to determine the amount of information retained by each community. The pre-program questionnaire was administered again, but with the questions in a different order, to determine the change in nutrition levels in the three communities. The questionnaire was actually administered four times: immediately before and after the project, again three months later, and finally one year following the program. With the final administration of the questionnaire, a dietary recall survey was also taken to define the sample population's food intake habits. Since the questionnaire measured the change in nutritional knowledge, and the dietary survey measured the change in consumption habits, the project could compare the two campaigns' effectiveness in altering attitudes and behavior.

RESULTS:

Traditionally, it has been thought that impersonal mass media, like radio, could not compete with interpersonal communication to change long-term and intimate attitudes and behavior, like eating. Therefore, it could be expected that the classroom group would score higher on knowledge and adoption of nutritional eating habits. In this campaign, however, the classroom and mass media treatment groups learned the nutritional concepts equally well. The classroom group increased their knowledge of nutrition by 53 percent, while the mass media group increased by 54 percent. Curiously, the control group increased their nutrition knowledge by 19 percent. They were not targeted to receive either treatment but were located close enough to the mass media community to receive radio broadcasts. This message "spillover" might account for the 19 percent increase in knowledge.

The dietary habits of both classroom and mass media groups changed in a positive way. The classroom group reported eating three times more fruit, fish, and oil, while the mass media group quadrupled its intake of fish, fruit, and vegetables. Both treatment groups decreased consumption of lard, corn, and soft drinks. Interestingly, the control group's eating habits also changed, but for the worse. The consumption of prestigious, less nutritious foods, such as sugar, bread, and soft drinks increased, while consumption of traditional nutritious items like beans and *chiles* decreased.

OF NOTE:

- The economy may have influenced the change in eating habits because, over the test year, the price of lard almost doubled, while vegetable oil held constant.
- Fish and vegetables were traditionally not consumed before the campaign.

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Clearinghouse on Development Communication
April 1980

MASS MEDIA NUTRITION-ADVERTISING CAMPAIGN
PHILIPPINES

TARGET AUDIENCE:	Rural low-income households in the provinces (approximately 2.5 million habitants)
OBJECTIVES:	To test the effectiveness of modern marketing and advertising techniques in changing behavior, attitudes, and knowledge related to the nutrition and health of infants
MEDIA:	Radio and limited interpersonal communication
DONORS/SPONSORS:	The Philippine Government, the U.S. Agency for International Development, and the National Media Production Center of the Philippines
DURATION:	Late 1975 to late 1976
CONTACTS:	Dr. T.A. Gomez, Director, National Nutrition Service, Ministry of Health and Nutrition, Manila, Philippines; Candy Formacion, Department of Nutrition, University of Iloilo City, Iloilo, Philippines; and Thomas M. Cooke, Manoff International, Inc., 1511 K Street, N.W. Washington, D.C. 20036

DESCRIPTION:

The Mass Media Nutrition-Advertising Campaign was launched in recognition of the sorry nutritional status of many Filipino children and of the inadequacy of using traditional means to counsel the mothers of underweight babies. Apprised of the successful use of advertising and marketing techniques to reach undernourished population in India and Ecuador with practical tips on diet and food preparation, Filipino nutritionists in the National Nutrition Council decided to try that approach. Their specific goal was to get Filipino mothers to enrich with chopped vegetables, oil, and fish the watery rice porridge (*lugaw)* given to their infants to supplement breast milk. The hidden task, more difficult that spreading messages, was to overturn some ingrained and incorrect—but widely held—ideas about the nutritional needs of the newborns.

The project activities began in 1975, when the U.S. Agency for International Development agreed to provide

funds to hire a U.S.-based advertising and social communication firm to work with Filipino planners to design, carry out, and evaluate the campaign. The first step involved the U.S. ream and their local counterparts in an exploratory trip through the target site (Iloilo Province, rural population 700,000). Early visits were scattershot attempts to gather impressions while later forays were part of a controlled survey of carefully selected mothers. The baseline survey revealed that only 3 percent of the mothers in the project area had heard of the practice of adding oil to lugaw and that none had actually tried it. More mothers (5 and 17 percent, respectively) had tried adding vegetables and fish to the mixture.

Message development, the second stage of the project, proceeded according to principles followed in commercial advertising. Message designers assumed that creating interest in a particular idea enlisting sympathy for the proposer of the idea—a feat that involves making sure that the message bearer is perceived as sane, likable, authoritative, and deserving of respect. They also took pains to insure that the change under discussion was not viewed as more sweeping or disruptive than it actually was. These compatible beliefs informed the six 60-second spot dramas that were eventually developed, tested, revised, recorded and sent out to area radio stations.

The six pre-recorded messages were broadcast in rotation from 15 stations during both the morning and evening hours, the times rural families are most likely to listen. Once the broadcasts begin, the locally recruited project workers distributed information on the concepts being promoted and on the campaign itself to the health and nutrition rehabilitation centers in the project area. Related information that had been developed with the help of Filipino doctors in another context was also supplied to the radio stations for distribution in response to listeners' requests. Broadcasts continued uninterrupted for one year.

Since the ability of radio messages alone to change food patterns was to be tested, no other special educational activities were undertaken during that test period. Doctors, nurses, and rural community workers were informed of the rationale of the campaign, but they were not encouraged to carry out any special education programs.

RESULTS:

A pre-project survey, an interim survey conducted in May of 1976, and a post-project questionnaire were

used to evaluate the impact of this campaign. The interim survey, conducted in May of 1976, revealed that the percentage of mothers who added oil *lugaw* increased from 0 to 23 in eight months. The number adding vegetables rose from 5 to 17 percent, and those adding fish rose from 17 to 27 percent. The comparable figures calculated after the final survey were 24 percent of oil, 17 percent of vegetables, and 27 percent for fish.

The post-project interviews also revealed that radio's role as a source of nutrition information was most strongly evidenced by the target audience's reports of adding oil. On the other hand, participation in and knowledge of existing nutrition and health service programs were more closely associated with adding vegetables and fish, traditional themes of nutrition education. No relationship between adding oil and these programs was found. This suggests that the innovation of adding oil may be attributed to the radio messages.

A separate survey of community health workers in the test area supported the findings of the household survey.

OF NOTE:

- The phrases and idioms that mothers used in the preliminary pre-project interviews were woven into the broadcast scripts and messages.
- Local health and nutrition workers served as hosts and guides to the survey team. For many, the survey offered the first chance they had had in months to visit remote places and talk with the people they supposed to serve.
- In the first months of the campaign, the "Vegetable Message with Doctor" was played more frequently than the "Oil Message with Doctor" simply because station managers failed to understand that each message must receive the same exposure because each is vital and different from the others. This problem was cleaned up in a meeting of station managers.
- The U.S.-based advertising firm that conducted the campaign in the Philippines conducted similar projects in Ecuador, Nicaragua, and the Dominican Republic, as well as other social communication projects in the United States.
- A mini-drama format was selected because the "novella" (or soap opera) is extremely popular in the Philippines and because it can accommodate the conflict that always arises when an unorthodox idea is presented.
- According to the advertising firm in charge of the campaign, the virtues of spot ads are many. Production costs are low, that passive listener is

reached, spots can be inserted within and between programs, and spots do not tire the listener the way lectures and discussions sometimes do.

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Clearinghouse on Development Communication
July 1978

BREASTFEEDING CAMPAIGN
TRINIDAD AND TOBAGO

TARGET AUDIENCE:	Mothers of infants and pregnant women in Trinidad and Tobago
OBJECTIVES:	To publicize the relationship between breastfeeding and both good nutrition and living standards
MEDIA:	Radio, television, posters, newspapers and periodicals, film
DONORS/SPONSORS:	The Housewives Association of Trinidad and Tobago (HATT), the Association of Advertising Agencies of Trinidad and Tobago with support from the Ministry of Health, the Caribbean Food Nutrition Institute (CFNI), and the Medical Association of Trinidad and Tobago
DURATION:	Conceived and implemented in 1974; scheduled to be re-run in late 1977
CONTACTS:	Alison White, Nutritionist, 14 Santa Anna Gardens, Maingot Street, Tunapuna, Trinidad and Tobago; and Hazel Brown, Caribbean Area Representative, IBFAN, P.O. Box 410, Port of Spain, Trinidad and Tobago

DESCRIPTION:

The Trinidad and Tobago Breastfeeding Campaign involved various private and governmental agencies in an effort to use the national mass media to promote breastfeeding. Coordinated by HATT with the support of the Advertising Agencies of Trinidad and Tobago, the campaign was planned in the early months of 1974 and officially launched in May.

Employees of the involved advertising agency received a three-page brief designed to describe the nutritional and economic aspects of breastfeeding and to convince them that they had a product worth selling. Once the advertising texts and artwork for the campaign were developed, clinic staff members and other health personnel were also briefed about the project and brought up to date on the benefits of breastfeeding.

Radio and television spot announcements reiterated messages carried by newspapers, posters, and handbills. The campaign was managed by media professionals who coordinated nine television programs

and a series of daily five-minute radio broadcasts (called "Keeping Abreast with Man's History") with press coverage. Discussion among schoolchildren and community groups were also part of the campaign, as were both centrally located and mobile library displays.

A key element in the breastfeeding project was the donation of time, expertise, and services by advertising agencies, governmental departments, media, commercial firms, and private citizens. These gifts were supplemented by rate reductions and other production advantages.

RESULTS:

CFNI's two-phase evaluation of the project entailed five objectives: (1) to find out what portion of the target audience had been reached; (2) to determine how much the messages influenced those who heard them; (3) to ascertain whether the women reached by the messages agreed with their content; (4) to discover whether nursing women had altered their breastfeeding practices; and (5) to obtain further information on Trinidadian women's breastfeeding practices.

On the basis of its evaluation, which constituted CFNI's major contribution to the program, the CFNI staff deemed the breastfeeding campaign a success and concluded that the components of the campaign out to be made permanent feature of the Trinidad's nutrition education program. It also affirmed the effectiveness of the multi-media approach; the team further recommended that even more time and space in the mass media be devoted to this vital issue.

OF NOTE:

- The wife of Prime Minister Manley of Jamaica endorsed the breastfeeding campaign in a pre-arranged tape-recorded conversation with HATT's president. The endorsement was later aired in support of the campaign.
- Fathers of infants were invited to a Father's Day function at which the merits of breastfeeding were discussed.
- Short films showed mothers and nurses in clinics testifying to the nutritional soundness of breastfeeding.
- The Trinidad and Tobago Breastfeeding Campaign will be covered in a forthcoming book by Dr. Derrick B. Jelliffe and E.F. Patrice Jelliffe on breast milk in the modern world.

- Radio stations donated more time to spot announcements than they had first promised to devote to the breastfeeding project.

REFERENCES:

"The Trinidad and Tobago Breastfeeding Campaign," Alison White, paper presented at the IXth Technical Group meeting of the Caribbean Food and Nutrition Institute, Kingston, Jamaica, September 1976.

Clearinghouse on Development Communication
June 1977

NUTRITION ADVERTISING CAMPAIGN
TUNISIA

TARGET AUDIENCE:	Poor families in depressed rural and urban areas
OBJECTIVES:	To test the effectiveness of combining existing face-to-face education with inexpensive radio nutrition-education
MEDIA:	Radio and interpersonal communication
DONORS/SPONSORS:	U.S. Agency for International Development and Tunisia's National Institute of Nutrition (NIN)
DURATION:	Conceived in 1975; pilot phase concluded in 1978; ongoing under NIN auspices
CONTACTS:	Dr. Jouhair Kallal, Director, National Institute of Nutrition and Food Technology, 11 rue Aristide Briand, Bab Saadoun, Tunis, Tunisia

DESCRIPTION:

A 1975 national nutrition survey conducted by Tunisia's National Institute of Nutrition (NIN) showed that several serious nutritional problems plagued the poor majority of Tunisia. Principal among these were vitamin deficiencies stemming form child-rearing practices whereby babies are kept swaddled and unexposed to sunlight, infants are given no nutritional supplements to breast milk, and young children are not fed protein-rich foods. Confirmation of these problems spurred NIN to consider sponsoring a media campaign aimed at informing parents of infants about simple nutritional practices capable of correcting the deficiencies identified and at motivating them to try such practices. At the same time, the Development Support Bureau of U.S. AID had contracted a U.S. consulting firm to conduct an experiment project to determine ways of combining the use of mass media with existing non-formal education. After reviewing Colombia, Honduras, and Tunisia as potential sites for this project, AID picked Tunisia as the most representative and receptive project site.

Radio was selected as the medium for this campaign because it seemed the best means of reaching the largest number of rural mother. Early in the project, the

consultants and NIN decided to use short spot messages, rather than long discussion programs. This decision was based in part upon earlier experiments in Nicaragua and the Philippines, which showed that repeated, simple messages can be effective in educating large populations about nutrition. The radio messages were developed systematically and were pre-tested at local Mother and Child Health Clinics (MCH's). Music and lead-ins were added by the National Radio Broadcasting faculty.

Five basic themes were selected: the importance of exposing infants to sunlight, babies' needs for supplemental feeding in the first year of life, the place of eggs and protein foods in the diets of healthy mothers and infants, the addition of vegetables to the infant's and mother's diet, and the importance of breastfeeding. The "fruits and vegetables" theme, for example, received seven different treatments and the "use protein" theme received nine. The bearer of these messages is the fictitious and now widely recognized "Dr. Hakim," a respected figure who dispenses practical advice (and whose name means "wise man" in Arabic).

Scheduling of broadcasts was organized to ensure that both fathers and mothers could hear the messages. At first, two messages (each lasting form one to two minutes) were broadcast three times each day. But during the program's early weeks, criticism from educated Tunisians prompted programmers to cut scheduling back to only two programs per day. This criticism related to the unavailability of some foods endorsed in the program and also reflected a belief of some Tunisians that short, oft-repeated messages insulted Tunisians intelligence. These complaints were softened, however, when neighboring countries began to express interest in duplicating the Tunisian program and when NIN staff responded directly to published criticisms and subsequently won press support.

The impact of the educational campaign was investigated by means of interviews of mothers who attended the MCHs. The project called for the selection of 16 clinics which a half-day seminar would be given to midwives and nurses to reinforce the ongoing non-formal education and eight clinics in which radio broadcasts would not be supplemented with seminars. A questionnaire was prepared and pre-tested for use at he end of six months of broadcasting to determine participants' knowledge, attitudes, and practices related to the five themes stressed in the project.

RESULTS:

The most clearly demonstrable success of the program has been the adoption of mass communication as an ongoing nutrition-education strategy by the Tunisian National Institute of Nutrition. The project stems form a relatively modest investment in training and program development and takes place in a setting in which media advertising of any nature was practically non-existent. This commitment to continuing the communication demonstrates, perhaps more tangibly than any evaluation statistics, the belief of the Nutrition Institute personnel that communications can make an important contribution to extending nutrition education to large number of the rural poor.

Data form a variety of sources, including both anecdotal comments and in-depth interviewing, indicate that the program's central character, Dr. Hakim, is a widely recognized figure in Tunisia. Eighty-eight percent of the mothers interviewed identified Dr. Hakim when asked who delivered the nutrition messages via radio. Through Dr. Hakim, nutrition has become a topic of general concern throughout the country. The ability of the Dr. Hakim program to reach Tunisian society has been concretely established.

The complexity of collecting reliable evaluation information on specific changes in people's nutritional behavior makes judgements on the educational success of the program less conclusive. Along with responses to certain items on the evaluation questionnaire, clinic reports of sharp increases in the use of SAHA, a supplemental food recommended in the programs, suggest that mothers' knowledge and perhaps even behavior were positively influenced by the program. If it is accepted that many of the objective indicators may be flawed, the self-reported increases in early exposure of infant to sunlight are positive signs of possible success. Many questions remain to be answered about the ability of communications to actually alter how people act, and this lends increased support to the need for more creative and innovative measurement strategies.

OF NOTE:

- Although this project is conducted with the aid of consultants, basic decision-making was not taken out of the hands of Tunisians.
- No control could be exercised over exposure to the radio messages. (Most families in Tunisia own at least one radio.)

- The Tunisian firm, El Amouri Institute in Applied Psychology, was subcontracted to assist in message development and data collection.
- Radio programs were produced in Arabic, so although the contribution of the contractor to final message content was somewhat limited, the messages did not suffer from the "translation effect."
- Strictly speaking, the project design used is valid only if two distinct groups are available for the experiment, which was not the case since health workers talked to control groups.
- The broadcast's powerful effect was probably due in part to the fact that the environment into which messages were sent was media-starved.
- Seminars and special events were designed to motivate clinic workers to link their existing educational efforts to the radio programs.

REFERENCES:

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Clearinghouse on Development Communication
April 1979

APROFAM FAMILY PLANNING PROGRAM
GUATEMALA

TARGET AUDIENCE:	Ladino and indigenous populations of Guatemala, particularly in rural areas
OBJECTIVES:	To increase knowledge and use of family planning practices, especially among Guatemala's rural and ethnicity divers populations
MEDIA:	Radio, television, posters, newspaper advertisements, print materials, interpersonal communication
DONORS/SPONSORS:	Asociacion Pro-Bienestar de la Familia (APROFAM); U.S. Agency for International Development; the Pathfinder Fund
DURATION:	APROFAM's Information, Education, and Communication (I-E-C) program for family planning begun in 1976; ongoing
CONTACTS:	Roberto Santiso Galvez, Executive Director, APROFAM, Apartado Postal 1004, Guatemala City, Guatemala; Dr. Jane Bertrand, 7722 Panola St., New Orleans, Louisiana 70118, U.S.A.

DESCRIPTION:

During 1977-78 the Asociacion Pro-Bienestar de la Familia (APROFAM), a private family planning association in Guatemala, carried out a nationwide communication program for family planning using mass media and interpersonal channels to reach both ladino and indigenous communities, particularly in rural area. Guatemala's population of approximately seven million is divided almost evenly between the Spanish-speaking ladinos and the indigenous Indians. These populations differ significantly from each other in such aspects as openness to change, use of traditional dialect, dress, standard of living, and cultural practices. The family planning communication campaign was based on a 1976 research study of selected rural areas that APROFAM had conducted to determine differences between the ladino and indigenous groups with regard to knowledge, acceptance, and practice of family planning. The research results showed that actual and potential

acceptance of family planning, as well as interest in obtaining further family planning information, were greater among the more "Westernized" ladino population. Using these results, APROFAM designed an Information, Education, and Communication (I-E-C) program to reach both rural groups, with special emphasis on reaching the less accessible indigenous population.

Radio spots announcements, the core of the I-E-C program, were pre-tested among members of the target populations. The radio spots for the ladinos were developed in Spanish and included explicit information about obtaining family planning services. Radio spots for the indigenous were translated into two of the four major Indial dialects (Quiche and Kekchi) and concentrated on the more basic issues: that family planning exists, is voluntary, is reversible, and can be beneficial to the family. A set of four posters was designed to reach the Indian population; while they depicted families in native dress, the messages were in Spanish. A poster directed to the ladino population; while they depicted families in native dress, the messages were in Spanish. A poster directed to the ladino population addressed the importance of husband-wife communication. Other components of the campaign included a television spot, aired weekly over a period of five months, intended to reach the nation's opinion leaders; a simplified folder that covered the most commonly-used contraceptive, intended for audiences with low literacy; and occasional newspaper advertisements, intended as much to balance any unfavorable press coverage as to encourage family planning use.

In conjunction with these communication activities, APROFAM sponsored several community-based distribution projects that provided a vehicle for interpersonal communication activities, such as small group discussions, home visits, and public meetings. However, these I-E-C activities were not expected to reach as large a percentage of the target population as were the mass media.

RESULTS:

In mid-1978, APROFAM, in collaboration with the Community and Family Study Center of the University of Chicago, carried out a follow-up research survey to obtain feedback on I-E-C activities and determine whether the anticipated changes had taken place in the two target populations. The ethnic differences with regard to family planning uncovered in APROFAM's 1976 study were underscored in the 1978 survey.

Results showed that, at the end of the two-year period, there had been significant increases in knowledge and practice of family planning among ladinos studied. Among the indigenous, although there was a marked decreased in strong resistance to family planning, no advances had been made in knowledge of specific methods, and use of contraceptives remained close to zero. A far greater percentage of ladinos than indigenous had been exposed to family planning messages via one or more mass media or interpersonal channels, and ladinos were more likely to remember what the messages said (specifically radio), sometimes repeating themes or slogans verbatim. Among the ladinos, use of contraceptives was higher among those with greater exposure to family planning messages, and informal communication among ladinos about family planning increased with exposure both to mass media and interpersonal channels of communication. Among the indigenous, this relationship held only for interpersonal channels.

Among the ladinos, 96.3 percent who had heard family planning radio spots approved of the broadcasts, and 100 percent of those who had seen a television spot favored this topic and method of communication. Only 60 percent of the indigenous approved of having family planning messages played on radio; no indigenous had seen the television spot. While 81.4 percent of the ladinos wanted more information on family planning, this was true of only 37.4 percent of the indigenous, whose major objections were religious.

Several implications have been drawn from the research results, some of which will have direct consequences for a pilot project that has recently been started in indigenous areas. As traditional I-E-C activities prove less relevant to indigenous populations, new strategies and methods must be developed, such as 1) through pre-testing of messages and materials for both appeal ad comprehension, based on an understanding of indigenous needs and motivations; 2) use of different, perhaps less direct, approaches, with less explicit family planning information, presented in combination with other subjects perceived by the indigenous to be in their direct interest (e.g. health of children, nutrition); and 3) greater use of person-to-person communication, due to the private character of the subject for the indigenous and the greater need to establish a certain level of confidence between the giver and receivers of the message.

OF NOTE:

- The community distribution program was implemented to increase the availability of low-cost contraceptives and eliminate some of the problems associated with an entirely clinic-based system, such as limited hours of availability of family planning services, distance, and expense of travel. In addition, employment of an indigenous distributor would lower distrust of ladino-staffed clinics among the indigenous. A second model of community-based distribution being implemented involves using family planning promoters with various agricultural groups that have expressed interest in establishing family planning programs for their workers.
- Some of the findings of the research dispel certain stereotypes regarding family planning in Latin America. For example, Roman Catholics were no less likely than others to know about, approve of, and use family planning, although people of any denomination who consider themselves "very religious" lag behind the less religious on all three points. In addition, men are as likely as women to have heard about, approve of, and want more information about family planning. Finally, rather than younger people being more open to family planning, it was found that interest in and use of family planning appear to peak between ages 30 and 34, with those younger and older having less tendency to know about or use contraceptives.

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Communicating Family Planning to Rural Guatemala, by Jane T. Bertrand, Maria Antonieta Pineda, and Fidel Enrique Soto. Asociacion Pro-Bienestar de la Familia, Guatemala; and the Community and Family Study Center, The University of Chicago, 1978.

"Ethnic Differences in Family Planning Acceptance in Rural Guatemala," by Jane T. Bertrand, Maria Antonieta Pineda, and Robert Santiso G., Studies in Family Planning, Vol. 10, No. 8/9, August/September 1979.

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Clearinghouse on Development Communication
September 1979

THE JAMU PROJECT
INDONESIA

TARGET AUDIENCE:	Javanese and Balinese males of reproduction age
OBJECTIVES:	To promote acceptance of family planning concepts and sales of condoms
MEDIA:	Radio spots, print, and interpersonal communication
DONORS/SPONSORS:	Prosperous Indonesia Foundation (YIS); Would Neighbors; the U.S. Agency for International Development
DURATION:	From 1974 to present
CONTACTS:	Prosperous Indonesia Foundation (YIS), Jakarta, Indonesia; Lukas Hendrafta and David Piet, Council of Churches in Indonesia, P.O. Box 2357, Jakarta, Indonesia

DESCRIPTION:

In 1972, the Indonesian National Family planning Coordinating Council (BKKBN) decided to enhance family planning efforts in Java and Bali by working outside the network of clinics, which are run by medical professionals and serve up to 35,000 people each. The decision reflected two assumptions: that the existing clinics could not properly meet the needs of such large clienteles and that family-planning efforts should be made a part of cultural mainstream.

The second assumption, along with word of relevant success stories from elsewhere in the developing world, led planners to consider marketing condoms through an established commercial system for the distribution of medicines. Family-planning programs in India, Sri Lanka, and Kenya had already used commercial distribution systems successfully. In each of these cases, however, a new distribution system had been created especially for contraceptive distribution. The Prosperous Indonesia Foundation envisaged, in contrast, a commercial distribution effort integrated into a familiar and established network.

For involvement in this project, YIS selected a single producer of *jamu*, whose name refers to a type of traditional herbal medicine still widely used in Indonesia. Half of the products of the *jamu* producer chosen to

participate in the project are cures for health problems. The other half of the product line consists of sex-related products (cosmetics and putative enhancers of sexual desire and sexual performance). The hope was that the association of health with love and sexuality would help involve in family planning these males who are seldom lured to family planning clinics.

Various media were used in the Jamu Project. Radio spots contained pitches for a virility potion ("Drink SEKHOT") ("sex hot") followed by the exhortation to "Use Karet KBs" (the condoms distributed as part of the project)..."Thoroughly enjoying yourself and show your prowess while giving pleasure and protection from unwanted pregnancy to your partner." The promotional posters and leaflets used by YIS bear a family-planning message and depict a happy, healthy family with two children. Illustrated instructions are included in every condom package.

The orientation of the seller of *jamu* products toward the purchaser has been characterized as personal and friendly. To sell their wares, most *jamu* salespeople engage potential customers in small talk.

RESULTS:

Since 1974, sales of condoms have averaged less than 1,000 gross per month, which has been judged by the International Committee on Applied Research in Population to be "far short of the level needed for program self-sufficiency." Only about 40 percent of the eligible retailers of *jamu* were handling KARET KB as of September 1975. So, to boost sale sand enthusiasm the Jamu Project undertook an intensive advertising campaign from October 1975 to March 1976. In the months of October to December alone, 100 radio stations broadcast over 50,000 advertisements on the subject.

As a result of the intensive advertising, the monthly sales reportedly increased to over 1,500 gross per month, and the percentage of eligible retailers selling the condoms increased from 40 percent to 49 percent. However, when the campaign ended, sales dropped back to their previous level. Of 625 recently surveyed retailers in Jakarta, 70 percent felt that the low subsidized price (and resulting assumption of inferior quality) acts as an important barrier to increased sales. However, evidence from other countries shows that subsidized condoms can sell well if supported by sustained advertising. Accordingly, project directors are investigating the possibilities of launching such an advertising effort.

OF NOTE:

- The jamu-marketing scheme was the first project to be supported by the Prosperous Indonesia Foundation (YIS), a private organization created by law in February of 1974 to "increase the welfare of the Indonesian people through the execution of health programs, population and community development."
- By choosing a well-established and highly successful company to market the condoms, the Jamu Project staff kept distribution costs down but also necessarily forfeited some decision-making power: the company employees feel that they know much more than the project staff does about marketing techniques and do not feel compelled to take advice from novices.
- Traditionally, jamu was prepared only by local *dukuns* (herbal specialist) according to traditional recipes. Today, the large *jamu* producers are modern organization with sales averaging millions of dollars per year.
- The final distribution points for *jamu* products are street sellers, mobile vans, and roadside stands.
- The expression "You are *jamu* seller" is reported to mean "You talk a lot."
- Planners felt that the "bartender"-type relationship the *jamu* seller tries to establish with the potential buyer might work more effectively than more formal and intimidating clinic-based education to involve men in family planning.

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"Advertising Aids Condom Sales," ICARP Bulletin, No. 1, September 1978.

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Clearinghouse on Development Communication
January 1979

THE MODEL FAMILY PLANNING PROJECT
IRAN

TARGET AUDIENCE:	Iranian women in both urban and rural districts
OBJECTIVES:	To increase women's acceptance of contraceptives and to stimulate continued use on the part of those initially enlisted in family planning programs
MEDIA:	Banners, mailings, films, radio, TV, print, exhibitions
DONORS/SPONSORS:	Iran Population and Family Planning; Iran Ministry of Health
DURATION:	Model phase lasted from June 1972 to June 1974; similar projects are now being introduced elsewhere in Iran
CONTACTS:	Dr. Medhi Loghmani, Deputy Director, Ministry of Health, 212 Abbas Abad St., Isfahan, Iran; Roy C. Treadway, Illinois State Universtiy, Normal, IL 61761

DESCRIPTION:

The Isfahan Model Family Planning Project is an example of an integrated approach to family planning. Taking place in Iran between June 1972 and June 1974, the project simultaneously used five means of reaching the target audience: (1) public and private clinics; (2) local pharmacies and support outlets; (3) full-time medical and paramedical family planning field workers; (4) part-time community agents; and (5) mass communications channels. All facets of the program had been previously tested in Najafabad and Shahreza (the study districts) and simulated varying degrees of family planning acceptance. Designers of this project hoped to discover a workable combination of various project components.

The Iran National Family Planning Program that was launched in 1967 and the Isfahan Communications Project that began in August 1970 paved the way for the Model Project. The family planning segment of the eight-month Communications Project used radio, films, exhibits, mailings, leaflets, banners, newspaper and magazine inserts, and an information van to generate new demands for family planning services. A concurrent

effort, the General Funtionary Project, furthered the goals of the Communication Project by educating selected members of the target group on the socioeconomic aspects of population growth, the benefits of family planning, and the use of contraceptive methods.

Representative of some government and semi-government agencies (The Red Lion and Sun Association, the Imperial Organization for Social Services, and others) worked closely with the Model Project personnel in setting up 20 IUD-insertion center in 49 pill and condom supply centers in 41 villages.

RESULTS:

Overall, the Model Family Planning Project is considered a success: the number of married women between the ages of 15 and 44 who used contraception increased between June 1972 and June 1974 from 6 to 21 percent. The discontinuation rates (23 percent of IUD recipients and 20 percent for pill users) turned out to be fairly high, but the motivational and educational impacts of the project also appear great. Almost all of the women studied (96 percent) are aware of the existence and availability of contraceptives, while 48 percent have tried at least one method.

Evaluators held that trained medical and paramedical personnel had most direct impact on the women's receptivity to contraception. The role mass communication played in reinforcing interpersonal communication—the messages received by friends and family who in turn relayed them to the women—remains a key, if unknown, variable. Follow-up surveys were not desired to measure the effectiveness of film, pamphlets, radio spots, and magazine and newspaper inserts at rallying support for the Model Project or of the message itself.

OF NOTE:

- Local community agents—schoolteachers, village leaders, granny midwives, agriculture extension agents, barbers, Literacy Corps workers, and taxi drivers—were enlisted to increase the number of people who accepted pills, condoms, and IUD's. These agents, most of whom were unpaid, recruited only 20 percent of the new acceptors, but the support and credibility they lent to the program were deemed essential to its success.
- All media messages focused on two questions: "Which is best, two or three children?" and "Which

method is best, the loop, pill, or permanent method?"

- During the mass media campaign, a UNESCO-sponsored film crew shot a film, "Mass Media and the Field-Worker," on how the mass media reinforced interpersonal communication in this effort. Copies may be obtained from the Division of Development of Application of Communication, UNESCO, 7 Place de Fontenoy, 75700 Paris, France.

REFERENCES:

"The Model Family Planning Project in Isfahan, Irna," Roy C. Treadway, Robert W. Gillespie, and Medhi Loghamani, Studies in Family Planning, Volume 7, Number 11, New York, New York, November 1976.

Clearinghouse on Development Communication
June 1977

THE HAVE A HEART FAMILY PLANNING CAMPAIGN
JAMAICA

TARGET AUDIENCE:	Jamaican men and women of reproductive age
OBJECTIVES:	To convince people of the impact family planning can have on the quality of life and to dislodge the fertility is a reflection of virility or womanliness
MEDIA:	Radio and newspapers
DONORS/SPONSORS:	The National Family Planning Board
DURATION:	Instituted in 1975; ongoing
CONTACTS:	Norma Soas, National Family Planning Board, 5 Sylvan Avenue, P.O. Box 287, Kingston 5, Jamaica

DESCRIPTION:

The Have a Heart Family Planning Campaign grew out of the Jamaican Government's realization that it would have to step up its family planning program if food shortages, overcrowding, underemployment, and unemployment were to be brought under control. The project complemented a series of government-sponsored efforts initiated in 1970 to increase Jamaicans' awareness of and receptivity to the use of contraceptives. While earlier campaigns bore themes such as "Plan Your Family, Better Your Life" and "Girls, You Don't Have to Get Pregnant" and stressed the benefits family planning affords the individual, the Have a Heart project emphasized consideration for others and concern about the future, as well as self-interest.

The public information segment of the Have a Heart campaign began in 1975 with radio and newspaper spots intended to familiarize Jamaicans with a broad range of contraceptives, to encourage pill and condom use in particular, and to create a general awareness of the role of family planning in personal and national development. A 34-part series of five-minute broadcasts, Family Life Education, covered family roles and structures, nutrition, the importance of privacy within the home, and a dozen other topics related to family size.

Later radio broadcasts dealt with sex and family planning more explicitly. Among other things, they told listeners how to choose a birth control method, how to explain reproduction and contraception to children, how a child develops in the womb, how to obtain counseling services, and how to avoid and detect venereal disease.

The present phase of the media effort that supports the Have a Heart campaign centers on full-page newspaper advertisements. The pictures and texts reinforce earlier messages, extend the discussion of family planning to topics such as child abuse and the physiology of human reproduction, and generate thousands of information requests.

RESULTS:

Within nine months of the inception of the campaign, a workable commercial marketing system for contraceptives had been extended to include many Jamaicans previously unreached by the contraceptive revolution. Not only were the brands endorsed and distributed during the Have a Heart project capturing a hefty percentage of the market, but overall sales of contraceptives were also running at new high. Moreover, an Advice Bureau (to which member of the public can write, telephone, or come for personal counseling) was established at the National Family Planning Board as a direct result of the campaign.

The Have a Heart campaign's use of the mass media was so successful that National Family Planning Board activities scheduled through 1980 will follow a similar plan, carrying the approach even farther to include fuller use of community-based communication channels.

OF NOTE:

- Condoms were marketed under the name of "Panther" while oral contraceptives bore the brand name of "Perle." Both were packaged handsomely and were designed to appeal to prevalent ideas of appropriate male and female roles.
- Typical commercial advertising was used in conjunction with radio spots and printed materials that incorporated discussion and feedback.
- To make disseminating information easier, the campaign staff identified four basic target groups: the "new generation," the "misinformed generation," "opinion leaders," and school children. Each group was approached on its own terms.
- Over 75 percent of those surveyed recently by the Institute of Mass Communication at the University of

the West Indies claimed to accept family planning as positive in terms of Jamaica's development.

REFERENCES:

"Jamaica's Family Planning Communication Program Now Based on 'Have a Heart,'" IEC Newsletter, No 25/26, East West Center, Honolulu, Hawaii, 1977.

"Use of Community Media Resources in a Communication Enterprise," Norma Soas, Caribbean Food and Nutrition Institute, mimeo J-113-76, Trinidad, September 1976.

Clearinghouse on Development Communication
June 1977

THE KOREAN MOTHERS' CLUB PROGRAM
KOREA

TARGET AUDIENCE:	Adult Korean women (roughly 700,000 in 28,000 clubs)
OBJECTIVES:	To encourage village communication to promote family planning, to enhance the social and economic status of village women, and to organize village development projects
MEDIA:	Magazines, charts, interpersonal communication
DONORS/SPONSORS:	Korea's Ministry of Health and Social Affairs; the Planned Parenthood Federation of Korea; the U.S. Agency for International Development; and the Swedish International Development Authority
DURATION:	Begun in a somewhat different form in the early 1960s as part of the National Reconstruction Movement; revived and revamped in 1968; ongoing
CONTACTS:	Dr. Hyung Jong Park, President, Korea Health Development Institute, 808 Chinyang Apt., 4-ga, Chung-Mu-ro, Chung-gu, Seoul, Korea; Dr. D Lawrence Kincaid, Research Associate, East-West Communication Institute, East-West Center, 1777 East-West Road, Honolulu, Hawaii 96822, U.S.A.

DESCRIPTION:

Mothers' Clubs grew out of a 25-year Korean tradition of women's organizations whose purposes have been to give women greater economic security and a more commanding voice in community affairs and development. The feature common to these organizations has been their formation of adjunct financial institutions—rotating credit associations, banks, or both. Formed in 1968, the Mothers' Clubs have modernized and expanded these banking and credit operations, but their chief reason for existing is to promote family planning as a primary component of integrated rural development.

The first Mothers' clubs were set up in administrative units that consisted of three villages each. Membership

requirements (pertaining to age, education, and prior involvement in community activities) served to keep the size of the clubs at about a dozen members each and to lend the clubs an air of prestige. Even with such restrictions, however, approximately 12,650 clubs had been formed by the end of the first year (partly because awareness of and knowledge about contraception is so high in Korea and because rural Korean women tend to know at least as much as their urban counterparts do about family planning). Gradually, most membership criteria were dropped, the size of individual clubs expanded to an average of 40 members, the administrative unit came to be the single village, and the clubs became self-supporting. Now their total number exceeds, 28,000.

Members of active Mothers' clubs cooperatively undertake several types of projects—educational, agricultural, construction, and income-generating—that typically involve organizing, physical labor, fund-raising, or all three. Members generally conduct business and make plans at regularly scheduled monthly or bimonthly meetings, and club leaders call ad hoc meetings as necessary. At each meeting, family planning and its relation to community and personal development is discussed and contraceptives are sold at lower than retail prices. In addition, the clubs' financial accounts are updated, and domestic problems are vented.

Club members are kept apprised of the activities of other clubs through two channels. One is the supervisor/promoter employed by PPFK. Each such coordinator oversees about 400 township associations (about 4,800 clubs), establishes new clubs, arranges training sessions for club leaders, and offers general support. The second is shared during regular meetings, contains articles and stories related to family planning and other aspects of home life. It also features a profile of an outstanding Mothers' Club in each issue. PPFK, Happy Home's publisher, hopes to begin in the near future radio broadcasts on many of the subject covered in the magazine.

RESULTS:

While promoting family planning is not the sole function of the Mothers' Clubs, this program component readily lends itself to quantitative measurements in a way that changes of social status or of communication flows do not. Research on the impact of the Mothers' Clubs family planning activities has, in fact, been quite extensive. More than one study has found that a high percentage (+80) of the clubs have low drop-out rates and high attendance rates, that record-keeping at the

local level has been exemplary, and that the Clubs have increased the effectiveness and eased the burden of professional fieldworkers. A Knowledge, Attitude, and Practice (KAP) Study conducted in 1973 showed that a much higher percentage of club leaders than either club members or nonmembers possess detailed knowledge of the various methods of contraception, that 46 percent of the club members practice contraception (compared to 28 percent of all nonmembers) and that relatively few women within or outside the clubs who did not practice contraception appeared to be motivated by fear, ignorance, or the censure of others (and may thus have benefited from the clubs indirectly). Although it cannot be proved that club membership alone affects knowledge and attitudes positively and significantly or that the Mothers' Clubs have boosted contraceptive use, most research supports the belief that the clubs promote and reinforce positive social, economic, and psychological changes that have their origins elsewhere.

A study of the communication aspects of one particularly successful Mothers' Club, a club located in a village once thought to hold little economic promise, led researchers to conclude that the club had met every criterion for successful communication: it had acquired necessary information in a timely fashion, processed the information accurately, and created new information that led it to take constructive action.

OF NOTE:

- Women's clubs based on the Mothers' Club model have been formed in Colombia, Egypt, Bangladesh, and the Philippines.
- Other organizations of village women—New Life Clubs, Housewives' Clubs, the New Village Movement Women's Clubs—serve some of the same purposes as the Mothers' Clubs. The overlap of activities has spurred both competition and discussion of the need to integrate the functions of various rural organizations.
- The most successful of the Mothers' Clubs sponsor activities that range from growing mulberry plants for silkworms to erecting concrete bridges to forming cooperative stores.
- The typical Mothers' Club leader is an opinion leader who is approaching 40. She has three children, practices family planning, has a primary education but no religious affiliation, and comes from the middle income stratum of her community.
- When polled, village women how had chosen not to join their local Mothers' Club most commonly gave as reasons a lack of time, opposition to family planning, a general lack of interest in club activities,

being new in town, or a shortage of money to invest in the Club Bank.

REFERENCES:

"The Korean Mothers' Club Program," Park and others, Studies in Family Planning, Vol. 7, No. 10, October 1976.

"Family Planning Education in Action: Some Community Centered Approaches, Judy E.-Burshra and Susan Perl, Inc. Extension College and IPPF, 1976.

"The Needle and the Ax—Communication and Development in a Korean Village," D. Lawrence Kincaid and June Ock Yum, in Communication and Change: The Last Ten Years—and the Next, East-West Center, 1976.

Clearinghouse on Development Communication
January 1978

MY BROTHER'S CHILDREN
NIGERIA

TARGET AUDIENCE:	Relatively well-off townspeople among the nine million Yourba of the Western and Kwara States
OBJECTIVES:	To promote family planning by presenting it in the context of the traditional indigenous culture
MEDIA:	Film, print, and interpersonal communication
DONORS/SPONSORS:	Family Planning Council of Nigeria; International Planned Parenthood Federation
DURATION:	Conceived and carried out in 1971
CONTACTS:	W. Ogionwo, Family Planning Council of Nigeria, P.O. Box 12657, Lagos, Nigeria; Deva Barrett, Media Logistics Officer, IPPF, 18/20 Lower Regent St., London SW1Y4PW, England

DESCRIPTION:

The Family Planning Council of Nigeria joined hands in 1971 with the International Planned Parenthood Federation to sponsor a broad-based, family-planning education program the chief feature of which was to be a film. In consultation, the two groups decided to aim the campaign at the Yoruba since the materials would have to be tailored to peculiar geographical and cultural/tribal customs if it was to have the desired impact upon its viewers. Two other factors influencing the choice of the target audience were the FPCN's longtime presence in Yoruba territory and the success of its clinical services and facilities in Kwana and the Western State.

IPPF and FPCIN hired a commercial British film company to produce the film "My Brother's Children." The film company, in turn, subcontracted another agency to conduct basic survey of the Yoruba's views on acceptable roles for women, family structures, and family sizes. Researchers concluded on the basis of this survey that the elder members of families (which are extended rather then nuclear) shape the family members' attitudes and behavior, that family members take responsibility for each other's welfare, that wives are expected to be subservient and devoted to their husbands' interests, that women make substantial—if erratic—contribution to the family purse, that men tend to

measure their sexual potency in terms of number of children their wives bear, and the decline of polygamy in Nigeria (with its customary separation of husbands and wives while children are being weaned) has adversely effected attempts to control population.

Once the story line had been developed, the film producers collaborated with two Yoruba communicators—one of whom is a well-known actor—on the final script. They then staged and filmed the polished version of the play in a Yoruba village using a professional but local acting company. Finally, on the basis of fieldworker's responses to a test showing, the film was edited.

Advance publicity for the film consisted of newspaper reports, radio interviews and televised showing of the film. When the 34 copies of the film were released during Family Planning Week in December 1971, so were two comic strip versions of the screenplay. (Both the film and the comic strip were reproduced in English as well as Yoruba.) Other forms of publicity included, bumper stickers, and the all-out person-to-person efforts of the Nigerian family-planning fieldworkers.

Typically, the film was shown in a family-planning clinic and followed by a discussion led by a fieldworker. The discussion leader attempted to move the viewers first to vocalize their reactions to the film and then to progress from the expression of opinion to the formulation of plans for action. Other showings of the film both within and outside Nigeria were before audiences composed of university students, development workers, and medical and government personnel.

RESULTS:

The film "My Brother's Children" was evaluated by the Nigerian sociologist charged with determining both the suitability of the medium and the impact of the messages. He also asked to compare the effectiveness of the film alone to that of the overall education effort. To carry the study, the sociologist identified two demographically comparable Yoruba villages with relatively easy access to urban centers; one of these rural communities was to serve as an experimental village, the other as a control. After distributing questionnaires in both villages and showing the film in one, the researcher measured the views' extent of recall, attitude change, and acceptance of the filmed messages.

The sociologist concluded that the film had had little effect on the attitudes of those who saw it—a finding

borne out of the tendency of the fieldworkers to use it less and less after the initial barrage of showings. Probable reasons for the film's failure to spur attitude changes include alien nature of the medium and of the equipment used to show the film, the complexity of the message carried in the film, the distorted presentation of some local customs, and the lack of receptivity among Nigerians to any message that can be constructed as negative or threatening.

OF NOTE:

- Film was chosen as the primary medium in the campaign because it could accommodate the oratory of traditional Yoruban didactic drama but, unlike some other dramatic forms, was not associated with fertility or sexual potency rites and messages.
- To minimize the possibility that viewers would find the film preach or high-handed, the central character was not allowed to become and object of scorn. Instead, he served as a narrator and told the story of his brother's irresponsible, unchecked fertility.
- Kola Ogunmola, the chief actor in the film, secured a copy of the film and integrated it into his own regular performances.
- An urban target audience was selected on the presumption that it would be a receptive audience. Urban couples, it was felt, might be more egalitarian in terms of decision-making, more apt to understand the need for change and to experiment with new lifestyles, and less likely than rural people to count on children as additional sources of income.
- The film struck some viewers as not quite true to life when a village elder gave a bride lengthy advice, instead of merely his blessing, at her wedding.

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Family Planning Education in Action: Some Community-Centered Approaches, IEC Broadsheet No. 8, Judy el Bushra and Susan Perl, International Extension College and International Planned Parenthood Federation, 1976.

"Family Planners Find Tradition and Child Morality Barriers to Acceptance of Program in Rural Nigeria," World Education Report, No. 8, January 1975.

Clearinghouse on Development Education
April 1978

AGRICULTURAL ANOLOGY APPROACH TO FAMILY PLANNING
PHILIPPINES

TARGET AUDIENCE:	Rural Filipinos
OBJECTIVES:	To introduce family planning to rural dwellers without unfamiliar technical terms
MEDIA:	Flipcharts, comic books, interpersonal communication
DONORS/SPONOSRS:	International Institute of Rural Reconstruction (IIRR) with funds from the SCAIFE Charitable Family Trusts, Communication Foundation for Asia (CFA), and Family Planning International Assistance (FPIA)
DURATION:	Project began in early 1974; evaluation in progress
CONTACTS:	Dr. Juan Flavier, International Institute of Rural Reconstruction, Silang, Vavite, Philippines, 2720; and Dr. Hans Groot, Family Planning International Assistance, 810 Seventh Avenue, New York, New York 10019 U.S.A.

DESCRIPTION:

The groundwork for the production of flipcharts and comic books using the concept of the Agricultural Analogy Approach to Family Planning was laid in 1974 when the International Institute of Rural Reconstruction and the Communication Foundation of Asia decided to use funds from FPIA to develop and co-produce materials for use in family planning education. Specifically, they agreed to create and pre-test a series of 12 comic books and four flipcharts designed to support the "agricultural analogy approach" to learning.

The agricultural analogy approach itself had been developed some years before by Dr. Juan Flavier of IIRR with funds form SCAIFE as a means of acquainting rural people with new concepts without introducing terms the people had never heard. The main concepts of the agricultural approach are the use of parallel or analogies from agriculture to explain new ideas, dependence upon the farm people themselves for the development of the analogies, reliance on discussion groups from seven to ten members each to discuss the analogies, and stress on both personal and community responsibility.

The colorful materials developed in support of the Agricultural Analogy Approach of Family Planning emphasized the "why" of family planning before spelling out the "what" and the "how." Issued monthly, the 16-page comic books each contained two stories focusing on a single agricultural theme and an illustrated center-spread designed to relate the theme to family planning. The flipcharts featured pairs of pictures, one depicting a family planning activity and the other an agricultural activity, united by one caption. The specific parallels and themes the materials covered were carefully selected after the project staff spent a week living with the farmers and fishermen slated to become the target audience.

Once the materials were developed and pre-tested, they were distributed through roughly 20 rural health units in the province of Cavite. Fifty thousand copies of each issue of the comic books and two hundred 15-part sets of flipcharts were sent into the field to test the notion that mass media can effectively multiply the sphere of influence of a family planning agent. Also at issue was the people's receptivity of familiar media, language, and examples to introduce unfamiliar subject matter.

RESULTS:

According to preliminary repots by IIRR, fertility rates among women in Cavite have declined as a result of the experiment in using agricultural parallels to present knowledge of family planning. While fertility has also declined among women approached by family planners who employ more conventional tactics, such declines are less dramatic than those achieved by the experimental group.

The media used in the campaign were evaluated by separate agencies. The J. Walter Thompson Company, a commercial advertising firm, conducted three sets of interviews in four Cavite villages to test the impact of the comic books. It fount that the comics successfully transmitted knowledge about what family planning is and about how any why it works, but exerted little influence on mothers' attitudes toward its practice. It also found that while comic books got the family planning message across, their effectiveness would have been greater had they included discussions of the side effects associated with various birth-control methods. In its assessment of the flipcharts, the University of the Philippines found that the charts were more effective than conventional learning devices at arousing the rural audience's interest and at increasing its knowledge of family planning.

OF NOTE:

- Previous attempts in the Philippines to teach family planning typically involved the use of Hispanicized English and of newly coined words, both of which confused and alienated the target audience.
- The use of verse captions on the flipcharts capitalizes on rural Filipinos' fondness for *balagtasan* (debate in verse) and *duplo* (couplets), two popular folk arts.
- The "agricultural approach" was first suggested by an elderly villager in a conversation with Dr. Flavier. "You mentioned ovary, ovum, uterus, and, frankly, they do not sound real to me," she said, "but I can understand them in terms of string beans whose seeds are extruded out and grow on fertile field.
- The analogies have been derived from four categories: plants, animals, household articles, and beliefs.

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"Agricultural Approach to Family Planning," Demetrio M. Maglalang, Communication Foundation for Asia, Manila, Philippines, 1976.

Clearinghouse on Development Communication
June 1977

BATINGAW
PHILIPPINES

TARGET AUDIENCE:	Filipino adult movie-goers
OBJECTIVES:	To use the medium of commercial film to promote the cause and further the understanding of family planning
MEDIA:	Film, VTR, print, TV, and interpersonal communication
DONORS/SPONOSRS:	The Communication Foundation for Asia, and the Ford Foundation
DURATION:	Conceived in 1973; produced in 1973-74; first shown in 1974
CONTACTS:	Ramon A. Tagle, Jr., General Manager, The Communication Foundation for Asia, 4427 Int. Old Sta. Mesa St., Sta. Mesa, Manila, Philippines; William O. Sweeney, The Ford Foundation, 320 East 43rd Street, New York, New York 10017, U.S.A.

DESCRIPTION:

The Communication Foundation for Asia (CFA) completed production of a feature film bearing the deep impress of a family-planning message in December of 1973, the eave of World Population year (1974). By substituting for an explicitly educational film format, a format with proven mass appeal, and by starring prominent actors in the film, CFA hoped to win the "responsible parenthood" message a large audience, segments of which do not see documentary films. CFA's secondary goal was to produce a "message" film that had some chance of attaining commercial success and, thus, of paying for production costs—costs usually borne by government agencies or foundations.

Producing the film that eventually became involved both the normal risks associated with any large-scale commercial film-making venture and the special problems and expenses that attend an experiment in communications. Besides equipping the film to compete at the box-office with action-packed martial arts movies and comparably escapist fare, the producers had to balance entertainment and education in a way the movie-going audience would find satisfying. Indeed, meeting simultaneously the demands of the marketplace, cinematic art, and communications

research required creating a research, production, and evaluation plan in which each type and phase of activity was mapped out in relation to all others. To lay this design, planners from CFA drew support from Population Commission, the UP Institute of Mass Communication, the Asian Social Institute, and other communication, development, and media organizations.

The production of Batingaw involved extensive pre-testing and audience feedback. In August 1973, the CFA Research team studied well-known directors to weigh the capability of each to bring a development message to life on the screen and named Pablo Santiago Director. During the same month, the researchers carried out in Greater Manila an eight-day survey to identify movie-goers' favorite actors, to form some idea of the typical movie-goer, and to find out both why Manila audiences go to the movies and what types of movies they prefer. The findings of this research were brought to bear on casting and the last rounds of scriptwriting. Then, in November, the team shot nine key scenes on VTR and played them for a 25-person sample audience in order to obtain feedback, which turned out to be positive both in terms of understanding and enjoyment. In January of 1974, after the script had been refined and filming was in progress, a final test took place: evaluators tried out the methodology they intended to employ to record movie patrons' response once Batingaw was released and found that their technique was favorably received by 80 percent of the 79-person urban sample.

The finished version of Batingaw, which opened to critical and popular acclaim in March 1974 and enjoyed a good run, challenges the notion that within development what people want is necessarily at odds with what they need. The Batingaw audience got exactly what it wanted—melodrama, action, top-notch talent, comic interludes, a long-suffering heroine, etc. The made-to-order plot revolves around the self-sacrifice of an elder daughter to her sibling's welfare, a lovers' triangle involving two sisters, and the deathbed reunion of a family rent by circumstances seemingly beyond its control—all favorite movie themes. At the same time, the subplots (variations on the ills that can befall children neglected by their parents) culminate tragically in a wayward father's reckoning with his failure to take responsibility for his family and hopefully in the inauguration of the town's first family-planning clinic. In subplots are integrated deftly with the main story line, and its theme of social responsibility is related as a family matter and not as a dismissible abstraction.

RESULTS:

Batingaw has been addressed in terms of the total number of people who have seen the film, reception by critics, box-office revenues, and the impact of the message on the audience. A formal evaluation conducted under contract of CFA by the Research Institute of J. Walter Thompson involved a random sample of 414 movie-goers in Manila, Iloilo City, and Davao city in an attempt to measure audience reaction to the family planning message and the extent of overlap of the viewers' and producers' perception of the films intent. Using the methodology tested in January 1974, the researchers first issued every tenth patron an invitation to report back to the lobby after the showing in order to claim a prize and then invited the prize-winner to spend 10 minutes answering questions. These interviews revealed that the sample audience (two-thirds of which were between the ages of 15-29 and over half of which had some high school or college education) recognized that family planning was the overriding theme of Batingaw, that is was nearly unanimous in its liking of the film, and that the majority responded favorably to lessons perceived to be of a moral nature. Some disagreements was detected as to the relative importance of the secondary theme, however.

Other indicators of success include the size of the audience and the gross box-office receipts. More than one million Filipinos saw Batingaw during its commercial run in Manila and in provincial theaters, and three million view it on Manila TV in conjunction with World Population Year. In addition, the film's audience includes those who have seen a 16mm re-taped print of the film distributed though the Population Commission. The film's commercial success enable CFA to set up a trust fund to finance other innovative family-planning projects, the first of which was the population audio-cassette "magazines" for use in waiting rooms of clinics.

OF NOTE:

- Batingaw, the original English script for which was called The Bells of San Jose, alludes to John Donne's famous line "Ask not for whom the bell tolls..." and refers to the old church bell in the town where the film's main action takes place.
- Untraceable rumors to the effect that Batingaw would contain explicit treatment of childbirth and rape, while unfounded, are thought to have aroused interest in the film, particularly in view of President Marcos' prohibition of such sensationalism. On the other hand, project guidelines specified that the audience was told in advance of the film's release

that Baingaw carried an explicit development message.

- The most overtly education segment of the film consists of a sermon on responsible parenthood. Preaching is made palatable during the sequence by the use of humor male members of the congregation who feel the pangs of conscience on hearing the priest's words sneak out of the church and give the audience an excuse to laugh.
- The production values of Batingaw are those for "outstanding expression of a theme of social significance" and " best art direction" at the 20th Annual Asian Film Festival in 1974. The film received nominations in almost all FAMAS (the Filipino Oscar) categories, taking the prize for best supporting actor, and it was shown in the Third International Film Festival in Tehran in December 1974 as an example of a first-rate Asian film
- Other Filipino films with development messages have been made in the wake of Batingaw's success. Entries in the 1975 Metro Manila Film Festival, for example, included films dealing with family planning, land, reform, and the preservation of the native culture.

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"The Making of Batingaw," Alfredo A. Café in From the Village to the Medium: An Experience in Development Communication, edited by Demetrio M. Maglalang, Manila, 1976.

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Clearinghouse on Development Communication
January 1979

PREETHI MARKETING PROGRAM
SRI LANKA

TARGET AUDIENCE:	Sri Lanka adults of reproductive age (approximately 5,000,000 people)
OBJECTIVES:	To test the effectiveness of normal marketing practices to distribute condoms widely and thereby increase the number of Sri Lankan couples who practice family planning
MEDIA:	Newspapers, radio, cinema, slides, print, and interpersonal communication
DONORS/SPONOSRS:	International Planned Parenthood Federation (IPPF); Family Planning Association of Sri Lanka (FPASL); and Population Services International (PSI)
DURATION:	Begun in 1973; ongoing
CONTACTS:	J.F.J. Morando, Marketing Director, CBD Project, Family Planning Association of Sri Lanka, Buller's Lane, Colombo, 7, Sri Lanka; S.D.N. Hapugalle, Community Development Services, 62-64 Cotta Road, Colombo 8, Sri Landa

DESCRIPTION:

The Preethi Marketing Program was launched to help curb population growth in Sri Lanka by making contraceptive more readily available to the population at large. Population Services International (PSI) was commissioned in 1973 by the International Planned Parenthood Federation (IPPF) to initiate a contraceptive-marketing program in Sri Lanka with the cooperation of the Family Planning Association of Sri Lanka (FPASL). The goal of the program was to demonstrate that commercial marketing techniques could significantly increase the number of couples using reliable, modern contraceptives and that unit costs would be as low as or lower than those associated with clinic-bases programs.

Prior to the establishment of the program, a feasibility study was undertaken by PSI to ascertain the most suitable country for demonstrating effectively the potential for social marketing of contraceptives. Five countries (Bangladesh, Sri Lanka, Indonesia, Malaysia, and Western Samoa) were considered as project sites. The main criteria for selecting Sri Lanka were the presence of (a) a good nationwide communications

network, (b) a high level of literacy (defined as the ability to read and write simple paragraphs), (c) a good infrastructure of commercial outlets, (d) a hospitable Government policy, and (e) a high proportion of married couples in the cast economy.

The Preethi Marketing Program began in May 1973. During the first six months, a two-person PSI management team, assisted by a part-time Sri Lankan marketing consultant, designed the operational plan and commissioned market studies, distribution, advertising, and printing by local social agencies and private companies. IPPF's evaluation office collaborated with PSI management in the design of evaluation instruments, while PSI monitored, modified, and evaluated the program.

On October 1st, 1973, nationwide distribution and mass-media advertising commenced. The launch period was designated as two years—the time required for a new product in Sri Lanka to settle into the distribution pipeline, be accepted by retailers, receive any marketing modifications, and find its prime market segment. It was anticipated that the post-launch period would bring acceptance by additional segments of the fertile population. During the first launch month, 3,177 retailers purchased more than half a million "Preethi" brand condoms from traveling representatives of the distribution firm.

Three levels of education and advertising were used during the launch period: (1) mass-media advertising of Preethi's benefits was aimed at target participants, mainly through newspaper, radio, cinema slides, and retailers' display; (2) all Preethi retailers were educated and motivated using personal visits, samples, and booklets; and (3) by means of a direct mail campaign, 4,500 elite opinion leaders were informed of the program to secure their approval of the program, the method, and the brand name.

By March 31st, 1975 (18 months after the launch period began), nearly 5.9 million condoms had been distributed, including 5.6 million sold to more than 4,000 retailers, 114,000 sold by mail order, and 124,000 given away as free samples. Mail-order sales began in January 1974; almost 2 percent of sales between October 1973 and the end of March 1975 were made by mail.

RESULTS:

The success of the Preethi Marketing Program recommends inclusion of the condom in a multi-method program. Use of the condom has improved the

protection by rhythm and provided a reliable alternative for those discontinuing use of the pill or IUD. The program to distribute Preethi has introduced new acceptors to the practice of family planning quickly and at low unit costs.

Preethi's future seems clear. In 1977, at a conference on "Villager and Households Availability of Contraceptives" held in Tunis, S.D.N. Hapugalle (Preethi project director since June 1975) reported that Preethi sales, which averaged between 300,000 and 330,000 units per month in the first two year, reached a level of over 500,000 units per month at the close of the third year since launch. By 1976, the per capita consumption of Preethis amounted to 0.5, five times the pre-program level for 1973.

Acceptance of Preethi by 8 percent of Sri Lanka's fertile couples in the first program year (at cost of only $2.16 per acceptor) and an increase in the annual per capita use of this contraceptive by a factor of five in less then three years suggest that policy-makers in developing countries should consider wider use of social marketing for the advancement of family planning. Furthermore, the marketing model tends to produce lower unit costs over time. This may make the introduction of similar program particularly appealing in those situations where program costs is an important factor.

OF NOTE:

- "Preethi' means happiness in both Sinhala and Tamil, the two predominant languages of Sri Lanka.
- In May 1975, PSI handed over management to IPPF's project director-designate, the former executive director of the FPASL. At that point the program was fully staffed by Sri Lankans.
- An essential aspect of the program was using an existing nationwide network of retailers to make Preethi available to the greatest number of fertile couples in the shortest possible time. Reckitt ad Colman (Ceylon) Ltd., an established and success marketer of various household products, was commissioned to package and distribute the imported product to its 4,000 prime retailers.
- In 1977, it was reported that although radio proved to have the best reach, this medium could not be used because product advertising of contraceptives by brand name is not permitted. The lack of radio support was felt because such support would have substantially increased sales. However, the project director has given radio talks during peak listening hours to address such subjects as "Planning for Progress," "Population and National Development,"

"Communication and Development," and "Social Marketing."

- The project director holds monthly meetings with distributors and advertising-agency employees to review progress and make sure that the objective of the project are being met.

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"Measuring the Effectiveness of Contraceptive Marketing Programs: Preethi in Sri Lanka," John Davies and Terrence D.J. Louis, Studies in Family Planning—a publication of the Population Council Volume 8, No. 4, April 1977.

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Clearinghouse on Development Communication
April 1979

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